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August 4, 2017

VIA EMAIL (jaharmon@idem.in.gov)

LSA Document #15-414 NO_x Emissions
Mr. Jack Harmon
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management
Indiana Government Center North
100 North Senate Avenue
Indianapolis, IN 46204-2251

Re: Comments of ArcelorMittal USA LLC on NO_x Emissions from Large Affected Units and Repeal of NO_x Budget Trading Program: Second Notice of Comment Period (LSA Document 15-414)

Mr. Harmon:

ArcelorMittal USA LLC ("ArcelorMittal") hereby submits these timely comments in response to the Indiana Department of Environmental Management's ("IDEM") Second Notice of Comment Period (LSA Document #15-414) on the proposed changes to the regulation of NO_X Emissions from Large Affected Units and repeal of the NO_X Budget Trading Program. ArcelorMittal operates four blast furnace gas-fired boilers at its Indiana Harbor East facility that will be affected by these rule changes.

ArcelorMittal supports IDEM's proposal to demonstrate compliance with the Non-EGU ozone-season NO_X budget without imposing new mass emission limitations on Non-EGUs. ArcelorMittal also supports IDEM's determination that blast furnace gas-fired units are not required to use Part 75 continuous emission monitoring.

I. ARCELORMITTAL SUPPORTS IDEM'S PROPOSAL FOR A NON-EGU REGULATION WITHOUT MASS EMISSION LIMITS OR CONTROL MEASURES.

ArcelorMittal supports IDEM's proposal to align state rules with new federal regulations by eliminating NO_x trading program obligations for large affected units¹ under the Clean Air Interstate

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¹ The units affected by this proposal are regularly referred to as large Non-EGUs. However, as IDEM points out in its proposal, neither the NO_X Budget Trading Program nor CAIR rules used the term Non-EGUs, and

⁴⁶ Offices in 21 Countries

Rule ("CAIR") (326 IAC 24) and the NO_X Budget Trading Program (326 IAC 10-4) provisions, without imposing new mass emission limitations on Non-EGUs.

IDEM is following U.S. EPA's instructions for the "Option 1" demonstration for NO_X SIP Call compliance. IDEM has demonstrated that the large affected units in the CAIR and Indiana's NO_X Budget Trading Program will not exceed Indiana's ozone-season NO_X budget level of 9,777 tons even if all the remaining Non-EGU sources operated every hour of the ozone season at their highest annual average NO_X emission rate from the period 2011–2014. The Non-EGU ozone-season budget is over 3,300 tons higher than IDEM's calculated maximum ozone-season NO_X emission rate for all remaining Non-EGU sources (~6,400 tons). Therefore, IDEM correctly concludes that Indiana's remaining Non-EGUs cannot reasonably exceed the budget established to protect downwind states. ArcelorMittal does not foresee a substantial demand for new or modified large affected units (>250 mmBtu/hr) subject to this rule. Smaller and more efficient steam generating units are expected to replace large affected units resulting in fewer units consuming less NO_X emissions from the ozone season budget. ArcelorMittal agrees with IDEM's conclusion that large affected units will not exceed the 9,777-ton ozone season NO_X budget in any future year.

With this demonstration, IDEM correctly concludes that new mass emission limits and control measures on large affected units are not necessary to meet the state's NO_X SIP Call obligation. Individual mass emission limits would also undermine the flexibility that both U.S. EPA and IDEM intended when the NO_X Budget Trading Program and CAIR were implemented for Non-EGUs. Both of these programs were premised on using a market-based approach to allow a pool of sources to collectively reduce emissions in an economical way. This approach proved successful, as Non-EGU sources have been retired or repowered to reduce aggregate emissions to levels that cannot now exceed the NO_X budget, even if the remaining units were operated every hour of the ozone season. Adding emission limits or mandating control measures for individual sources after such a cooperative program has succeeded undermines these programs and creates disincentives that could jeopardize the success of future trading programs.

IDEM's proposed approach preserves the cap on total NO_X emissions from large affected units in accordance with its NO_X SIP Call obligations and provides the protection the SIP Call determined was necessary to address impacts on downwind states. This approach preserves both air quality and economic opportunity in Indiana.

II. IDEM CORRECTLY CONCLUDES THAT BLAST FURNACE GAS-FIRED UNITS ARE NOT SUBJECT TO PART 75 MONITORING.

While Section 3 of IDEM's proposed rule (326 IAC 10-2-3) generally requires that large affected units comply with the monitoring requirements of 40 CFR 75, Subpart H ("Part 75"), the proposed rule exempts blast furnace gas-fired units from these requirements. See 326 IAC 10-2-7 (as proposed) ("The owner or operator of a large affected unit combusting blast furnace gas is exempt from section 3 of this rule. . . ."). ArcelorMittal agrees that federal rules do not require Part 75

the term does not accurately reflect all sources potentially affected by the proposal. Thus, IDEM refers to these units as large affected units in its proposed rule. In these comments, ArcelorMittal uses these terms interchangeably.

monitoring for blast furnace gas-fired units and supports IDEM's exemption in 326 IAC 10-2-7 as proposed.

Federal rules direct that each state's SIP revision submitted under 40 CFR § 51.121(a) to comply with the "Good Neighbor" provisions at section 110(a)(2)(D)(i)(I) of the Clean Air Act must require Part 75 monitoring for *fossil fuel-fired* NO_X sources subject to control measures under the SIP revision. See 40 CFR § 51.121(i)(4). Blast furnace gas is not a fossil fuel. Blast furnace gas is a product of a chemical reaction involving iron oxide in a blast furnace used to convert iron ore into molten iron, which, importantly, has significantly lower NOx emissions than fossil fuels. See THE MAKING, SHAPING AND TREATING OF STEEL (10th ed.), at 577 (presenting blast furnace operational reaction equation nos. (3)–(8)); see also Letter from George R. Stevens, Acting Chief Compliance Monitoring Branch, DSSE, EPA to Bruce Miller, Technical Advisor, Air Eng'g Branch, Region IV, EPA (June 16, 1976) (finding that blast furnace gas is not a fossil fuel).

Fossil fuel-fired sources include those that combust fossil fuels at a rate exceeding 50 percent of the total heat input of fuels combusted. See id. at § 51.121(i)(5). Thus, a blast furnace gas-fired unit is not a fossil fuel-fired unit if it combusts at least 50% blast furnace gas. To qualify for the exemption proposed in 326 IAC 10-2-7, "[t]he owner or operator shall ensure that greater than fifty percent (50%) of the heat input is derived from blast furnace gas averaged over each ozone control period." Importantly, the affected boilers are not required to meet the 50% requirement during "blast furnace reline, startup, and periods of malfunction". See 326 IAC 10-2-7(4) (proposed). This language was previously adopted and SIP approved in 326 IAC 10-3-1(e) for the blast furnace gas-fired units that did not opt to be included in the NOx ozone season trading programs. ArcelorMittal supports using common language for 10-3 and 10-2-7 so that blast furnace gas-fired units are treated similarly whether or not they participated in the trading program. IDEM appropriately excludes temporary blast furnace gas interruptions, startups and malfunctions from the obligation to ensure that an exempt unit meets the 50% blast furnace gas threshold. These are circumstances when natural gas may be needed to temporarily sustain steam flow. The cost and burden of Part 75 monitoring (discussed more completely below) should not be imposed based on these periods outside of normal boiler operating conditions and when blast furnace gas supply is temporarily interrupted.

IDEM reached the same conclusion that blast furnace gas-fired units are not fossil fuel-fired units required to use Part 75 monitoring when it promulgated 326 IAC 10-3. That portion of the Good Neighbor SIP regulated the blast furnace gas-fired units that did not choose to opt into the NO_X budget and CAIR trading programs. The non-trading option for blast furnace gas-fired units did not require Part 75 continuous emission monitors. Instead, those units could monitor operating parameters during the ozone season and apply an emission factor to calculate ozone-season NO_X emissions. ArcelorMittal operates blast furnace gas-fired units at its Burns Harbor and Indiana Harbor facilities that monitor NO_X emissions in accordance with the 326 IAC 10-3 rule requirements. IDEM is now proposing that this reliable emission factor approach to monitoring be available to the blast furnace gas-fired units exiting the trading program. ArcelorMittal supports IDEM's choice to apply a consistent monitoring approach across all blast furnace gas-fired units recognizing that Part 75 monitoring is not required for these non-fossil fuel-fired units.

III. IDEM MAY ALSO SUPPORT ALTERNATIVES TO PART 75 MONITORING FOR AFFECTED UNITS WITHOUT CONTROL MEASURES.

If needed, IDEM may also support its decision to offer alternatives to Part 75 monitoring in other ways. For instance, Part 75 monitoring is only required if the "[SIP] revision contains *measures to control* fossil fuel-fired NO_X sources. . . ." See 40 CFR § 51.121(i)(4) (emphasis added). As revised, the proposed SIP revision no longer contains measures to control NO_X sources. Therefore, IDEM may offer Non-EGUs the option of shifting to a reliable monitoring methodology that is less burdensome and costly than the Part 75 monitoring currently required in Section 3 of the proposed rule.

Currently, Section 3 as proposed requires:

The owner or operator of a large affected unit subject to this rule . . . shall comply with the monitoring, record keeping, and reporting requirements as provided in this rule and in 40 CFR 75, Subpart H*, except as provided in this rule.

326 IAC 10-2-3(a) (as proposed). IDEM may offer an additional exception that allows a source that is not subject to a NOx control measure to monitor NOx emissions during the ozone season using an approved alternate monitoring method other than Part 75.

A. <u>Federal Regulations Do Not Require Part 75 Monitoring for Large Affected</u> Units not Subject to NOx Control Measures.

In the background material accompanying this proposed rule, IDEM indicates that it "is proposing Part 75 monitoring requirements to comply with 40 CFR 51.121." This federal rule requires IDEM to require Part 75 monitoring if the SIP revision contains NOx control measures:

If the revision contains measures to control fossil fuel-fired NO_X sources serving electric generators with a nameplate capacity greater than 25 MWe or boilers, combustion turbines or combined cycle units with a maximum design heat input greater than 250 mmBtu/hr, then the revision must require such sources to comply with the monitoring provisions of part 75, subpart H.

40 CFR § 51.121(i)(4). In prior rules, the control measure was the individual source requirement to hold enough of the limited NOx allowances at the end of each ozone season to cover actual emissions. Non-EGUs are no longer subject to this control measure. IDEM does not suggest that its proposed rule contains a control measure. Instead, IDEM proposes to require Part 75 monitoring because it "is unable to determine whether or not it is possible to show that no emission reductions from large affected units would be required in the future." But the relevant federal regulation only requires Part 75 monitoring when the revision *contains* control measures not when control measures may be required in the future.

Further, the SIP is only required to contain control measures "adequate to prohibit emissions of NO_X that would otherwise be projected . . . to cause the jurisdiction's overall NO_X emissions to be in excess of the budget for that jurisdiction." See 40 CFR § 51.121(b)(1)(i). Since IDEM has shown that the relevant NO_X emissions will not exceed the budget, IDEM is not required to include

control measures in the revised SIP rule to control NO_x from the remaining large affected sources. It follows logically that Part 75 monitoring is not required when there is no NO_x emission limit at the individual source to verify for control measure purposes. Thus, under 40 CFR § 51.121(i)(4), IDEM is free to offer alternatives to Part 75 monitoring for large affected units.

This conclusion is further supported by the state of North Carolina's proposed SIP revision. The state's cover letter to U.S. EPA² indicates that "Part 75 requirements for existing non-EGUs are unnecessary, not beneficial and not cost-effective"; thus, "[t]he purpose of the proposed SIP revision is to remove 40 CFR Part 75 monitoring, record keeping, and reporting requirements for non-EGUs that were included in the NO_X Budget Trading Program but excluded from the Cross-State Air Pollution Rule federal trading program." The Final Revision to the North Carolina State Implementation Plan³ explains why Part 75 monitoring is not required:

However, the EPA did not use the ozone season monitoring data for its CSAPR rulemaking process, and relied on annual emissions reported in the National Emissions Inventory (NEI) to represent non-EGU sources in the CSAPR air quality modeling analysis. Since the non-EGU monitoring data is no longer needed to determine compliance with the CSAPR, and the EPA does not deem it useful for air quality analysis for this sector, there is no arguable reason for maintaining the costly and burdensome Part 75 monitoring intended to ensure ozone season emissions levels are below the NO_X SIP Call budget.

Final Revision to the North Carolina State Implementation Plan at 12.

With this support, we encourage IDEM to offer Non-EGUs the option to use approved alternative monitoring instead of Part 75 monitoring. Approved alternate monitoring would include monitoring contained in another rule, such as the monitoring approach used for blast furnace gas-fired units subject to 326 IAC 10-3.

B. Part 75 Monitoring Was Designed for Trading Programs That No Longer Exist and Is Poorly Suited to the Current Rulemaking for Large Affected Units.

IDEM may also justify the use of approved alternate monitoring as better suited for units no longer subject to a trading program. Part 75 requirements were developed to provide the detailed information necessary to support verification of emissions under the acid rain trading program. A significant degree of accuracy is required under these programs because emissions are bought and sold in a market-based system that demands this level of precision. This same philosophy was transferred to both the NO_X Budget Trading Program and to CAIR. Now, in the absence of a trading program for Non-EGU units, IDEM is only required to assess whether the collective emissions from the large affected units exceed the overall NO_X SIP Call budget. IDEM has properly determined that the budget is 35 percent higher than the maximum ozone-season NO_X

² Available at: https://ncdenr.s3.amazonaws.com/s3fs-public/Air%20Quality/planning/attainment/NonEGU/NOx%20SIP%20Call%20Heather McTeer Toney Transmital Letter Final%2007-20-2016.pdf.

³ Available at: https://ncdenr.s3.amazonaws.com/s3fs-public/Air%20Quality/planning/attainment/NonEQU/NOx%20SIP%20Call%20Transition%20for%20Large%20Non-EGUs%20-%20110l%20Demo%20-%20Final%20-%20July%2020%202016.pdf.

rate from all the large affected units combined. There is no need for minute-by-minute or even hour-by-hour NO_x emissions information when the relevant compliance measure is the collective emissions from all large affected units over the course of the ozone season. The new scheme that IDEM is implementing in this proposed rule does not warrant the significant burdens associated with Part 75 monitoring—which include some of the most rigorous testing and verification procedures for any monitoring devices under the Clean Air Act.

Part 75 is also not the most accurate and reliable monitoring method for large affected units. IDEM has recognized in the background documents for the proposed rule that "Part 75 monitoring contains provisions that can distort the accuracy of the NO_X emission rate by penalizing sources for monitor downtime." Part 75 penalizes a source for monitor downtime by requiring assumed NO_X emission rates that far exceed actual NO_X emission rates. See 40 GFR §§ 75.31(c),(d), 75.33(c),(d). ArcelorMittal is finding that older CEMS experience more downtime and, therefore, the Part 75 penalty for downtime is an increasingly significant component of the ozone-season NO_X calculation for its Non-EGU sources. This may have been justified as an incentive to properly monitor under a trading program when a source may purchase NO_X allowances to cover the elevated assumed gap-filling emission rates. However, now that trading is over for large affected units, this Part 75 assumption interferes with IDEM's obligation to accurately estimate ozone-season emissions for large affected units. We encourage IDEM to embrace this opportunity to remove burdensome monitoring requirements that are no longer needed or required to generate the information necessary to demonstrate compliance with the Non-EGU NO_X budget.

C. <u>The Costs of Maintaining CEMS Is Not Justified in the Absence of a Trading Program.</u>

IDEM also has the opportunity to provide relief from the significant Part 75 costs that similar sources in other states are not required to pay. Part 75 monitoring costs can no longer be offset by the sale of excess allowances in a trading program. Many units installed their CEMS over a decade ago, and several monitoring components are nearing the end of their useful life. Total replacement will eventually cost in excess of \$350,000 for each of ArcelorMittal's large affected units required to operate a Part 75 CEMS. In the interim, where the CEMS unit can be salvaged and maintained, software upgrades and hardware replacements will need to be made if these units are to continue certified CEMS operations, with costs in the tens of thousands of dollars for each unit. This is in addition to the annual operating cost of each CEMS unit, which includes software licensing fees, calibration gases, RATA testing, and consultant fees. These annual operating costs can approach \$100,000 each year.

IDEM has the opportunity to extend relief from these costs to all Non-EGUs no longer subject to NOx control measures. IDEM has an approved alternative monitoring approach in 326 IAC 10-3 that generates reliable NOx emission information using a continuous operating parameter (heat input) and an emission factor. With no federal obligation to require Part 75 monitoring until control measures are required, U.S. EPA should not be insisting on Part 75 monitoring in this rulemaking. We encourage IDEM to offer Non-EGUs a choice among approved monitoring alternatives. Even if IDEM believes there is a risk that control measures will be required in the future, the decision to continue Part 75 monitoring or choose a less costly alternative until a control measure is imposed is a decision that should be left to each affected source in the absence of a legal mandate.

Thank you for considering these comments in your upcoming rulemaking. If you have any questions or require further support, please do not hesitate to contact me at 216-479-8332.

Sincerely

Douglas A. McWilliams

Counsel for Arcelor Mittal USA LLC

DAM/crl

cc: Keith Nagel, ArcelorMittal

Julianne Kurdila, ArcelorMittal



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August 4, 2017

Via E-mail Transmittal: jaharmon@idem.in.gov

LSA Document #15-414 NOx Emissions Mr. Jack Harmon Rules Development Branch IDEM Office of Legal Counsel 10 North Senate Avenue Indianapolis, IN 46204-2251

RE: Second Notice of Comment Period

LSA #15-414 NOx Emissions from Large Affected Units and

Repeal of NOx Budget Trading Program

Dear Mr. Harmon:

Citizens Energy Group ("Citizens") submits these comments in response to the Indiana Department of Environmental Management's ("IDEM") Second Notice of Comment Period (LSA Document #15-414) intended obligations related to the NOx Budget Trading Program. Citizens operates six (6) boilers considered *large affected units* at its Perry K Steam Plant in Indianapolis that are affected by these draft rule changes.

Our comments focus on the approach proposed by IDEM to satisfy the obligations of the NOx Budget Trading Program; both the demonstration and the monitoring.

Demonstration Methodology

Citizens appreciates IDEM's willingness to prepare the demonstration needed to document that NOx emissions from large affected units do not exceed the budget established through the NOx Budget Trading Program of 9,777 tons of NOx per ozone season. IDEM shared a spreadsheet with stakeholders in which it had identified the large affected units and their respective NOx emissions during the ozone seasons (May 1 – September 30, inclusive) for calendar years 2011 – 2014.

IDEM's demonstration indicated that potential NOx emissions from the large affected units are less than 6,400 tons per ozone season, significantly lower than the established budget. In evaluating the emissions and operations data, IDEM *pro-rated* NOx emissions from the large affected units, assuming an emission rate equivalent to the highest ozone season over the 3,672 hours during the ozone season. This methodology is an appropriate way to approach the demonstration insomuch as it creates a conservative bias to the data. Barring a significant change

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in the pool of large affected units (e.g., the construction or addition of additional units that meet the definition of a large affected unit and that emit in excess of 3,300 tons of NOx during the ozone season), Indiana will meet its obligations to limit NOx emissions from large affected units to less than 9,777 tons of NOx per ozone season without additional measures needed.

Because IDEM staff looked only at emissions data without consideration to changes in the emissions units year over year that may reduce NOx emissions, the prorated NOx emissions included in the demonstration most likely vastly overestimates the actual emissions. For example, Boilers #12, #15, and #16 at Citizens' Perry K Steam Plant were converted from coalfired to natural gas-fired, a change that resulted in a significant reduction in NOx emissions when compared to the calculated maximum potential NOx emissions that IDEM has highlighted for purposes of its demonstration for these three boilers. The conservative bias of the approach taken through the demonstration coupled with these types of permanent fuel source changes further supports the position that ozone season NOx emissions from the large affected units in Indiana will not exceed the budget established by U.S. EPA.

Ongoing Continuous Emissions Monitoring Obligations

In its comments on the First Notice, Citizens requested that IDEM consider alternatives for the owners and operators of large affected units that would not require the operation and maintenance of continuous emissions monitoring ("CEMs") equipment pursuant to the requirements of 40 CFR Part 75 ("Part 75") because of the resources (financial, personnel and equipment) required to meet this obligation under Indiana's NOx SIP.

The burden is not unique to Indiana; US EPA recognizes this fact. In its June 29, 2017, Notice¹ related to the *Renewal for the Information Collection Request for the NOx Budget Trading Program to Reduce the Regional Transport of Ozone* ("ICR"), the U.S. EPA indicates that there are 122 former NOx Budget Trading Program units (the large affected units like those impacted by this rulemaking) that will continue to conduct monitoring in accordance with Part 75 solely under the NOx SIP call. The Notice goes on to state the total estimated burden of the ICR is 57,586 hours per year and the total estimated cost is \$8,066,616.00 per year, which includes \$3,777,000.00 annualized capital or operation & maintenance costs.

The U.S. EPA's own data suggests that the cost to the owners of units obligated to comply with the operation and maintenance of CEMs pursuant to Part 75 solely for the purposes of proving that NOx emissions during the ozone season do not exceed the conservative estimates in the demonstration includes a labor burden of 472 hours per year *per unit* at an estimated average cost per unit of approximately \$66,000.00 per year.

In its response to comments on the First Notice on this point, IDEM indicated that "Part 75 monitoring requirements must remain in place to ensure continued compliance with NOx emission reduction requirements in the NOx SIP Call rule[.]" and "...keeping Part 75 monitoring in place is a *federal mandate* required for U.S. EPA approval of this rulemaking." (emphasis added). Based on other responses to comments on the First Notice, Citizens believes that IDEM

¹ https://www.gpo.gov/fdsys/pkg/FR-2017-06-29/pdf/2017-13676.pdf

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is referring to 40 CFR §51.121 that contains the obligations for the NOx Budget Trading Program.

Citizens understands that for purposes of allowance accounting under the ozone season NOx budget trading program, the Part 75 monitoring requirements were important to ensure quality assured CEM data was available. Indeed, because the NOx Authorized Account Representative was obligated to certify the emissions data during reconciliation and to ensure that sufficient allowances were held in compliance accounts, the owners and operators understood the need to have stringent monitoring requirements. In the current situation, however, IDEM's demonstration has illustrated that "...maximum ozone season emissions from large affected units are well below the NOx SIP Call budget." See IDEM's First Notice Response to Comments Page 6 of 26.

Given IDEM's own statement that maximum ozone season emissions from large affected units are below the budget, and the on-going costs of monitoring, recordkeeping, and reporting under the Part 75 monitoring program as illustrated by U.S. EPA's ICR, Citizens believes that it is in the best interest of the State of Indiana to find a way to implement this rule with alternatives to the requirement to operate Part 75 compliant monitoring equipment on large affected units. We would encourage IDEM to consider an approach to monitoring that provides options to the owners and operators that produces data needed to provide the on-going assurances but allows the owners and operators of large affected units a way to reduce O&M expenses. For example, IDEM could propose as an alternative monitoring approach the use of an emission factor based on historic CEMs data with fuel use to develop a mass emission rate. Citizens believes that such an approach would be defensible to U.S. EPA but also addresses the significant costs of Part 75 monitoring, allowing limited resources to be focused where they provide a greater benefit than monitoring for the sake of monitoring.

40 CFR Part 96 (referenced in 40 CFR §51.121) contains model regulations that, if a state adopted substantially identical, expedited review of the State Implementation Plan (SIP) submittal for the NOx Budget Trading Program. The obligations related to Part 75 monitoring stem from 40 CFR Part 96.

Citizens would offer that this rulemaking, while intended to codify in state rules the ongoing obligations under 40 CFR §51.121 for large affected units, does not have to mirror 40 CFR Part 96. Because there is (appropriately) no allowance trading program for NOx emissions for large affected units in Indiana, the need to require the stringent data obligations under Part 75 does not exist. Part 75 data was integral to allowance use, whether used by the owner when accounting for emissions or sold through the trading program to another user.

In this case, Citizens believes that data produced through the suggested alternative approach would be of sufficient quality to ensure that emissions from large affected units do not exceed the budget, while at the same time minimizing the compliance cost burden for Indiana sources. Citizens would like to note that the alternative it is asking IDEM to provide is nearly

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identical to what IDEM has proposed in this draft rule for boilers fired primarily by blast furnace gas.

Reporting Emissions Data

Regardless of the methodology used to determine emissions, Citizens appreciates that IDEM will need to have data from large affected units in order to satisfy its own obligations to ensure that emissions do not exceed the cap established in the NOx Budget Program.

Citizens requests that IDEM reconsider the Part 75 requirement to submit electronic reports to the U.S. EPA through the *Emissions Collection and Monitoring Plan System* (ECMPS). Because Indiana's large affected units are not participating in the allowance trading program, there is no need for the types of data that is required to be reported through ECMPS, especially on an hour by hour basis. IDEM needs sufficient data to demonstrate the on-going validity of the demonstration. Citizens believes this can be accomplished through a periodic report to IDEM and recommends that this report be an ozone season summary report that should be submitted no later than November 1st each calendar year.

We appreciate the opportunity to submit comments on this Second Notice. Should you have questions or wish to discuss this, please do not hesitate to contact me by phone at (317) 927-4393 or via e-mail at amciver@citizensenergygroup.com.

Sincerely,

Ann W. McIver

Ann W. McIver, QEP Director, Environmental Stewardship

August 04, 2017

Via E-mail Transmittal: jaharmon@idem.in.gov

LSA Document #15-414 NOx Emissions Mr. Jack Harmon Rules Development Branch IDEM Office of Legal Counsel 10 North Senate Avenue Indianapolis, IN 46204-2251

RE: Second Notice of Comment Period LSA #15-414 NOx Emissions from Large Affected Units and Repeal of NOx Budget Trading Program

Dear Mr. Harmon:

Alcoa Power Generating Inc. Warrick Power Plant (WPP) submits these comments in response to the Indiana Department of Environmental Management's ("IDEM") Second Notice of Comment Period (LSA Document #15-414) intended obligations related to the NOx Budget Trading Program. WPP operates three (3) boilers that are considered *large affected units* at its Warrick Power Plant that are affected by these draft rule changes. WPP's units constitute ~80% of all of the industrial boiler emissions regulated by the NOx Budget Training Program.

WPP appreciates IDEM's willingness to prepare the demonstration needed to document that NOx emissions from large affected units do not exceed the budget established through the NOx Budget Trading Program of 9,777 tons of NOx per ozone season. IDEM shared a spreadsheet in which it had identified the large affected units and their respective NOx emissions during the ozone seasons (May 1 – September 30, inclusive) for calendar years 2011 – 2014.

IDEM's demonstration indicated that potential NOx emissions from the large affected units are less than 6,400 tons per ozone season, significantly lower than the established budget. In evaluating the emissions and operations data, IDEM *pro-rated* NOx emissions from the large affected units, assuming an emission rate equivalent to the highest ozone season over the 3,672 hours during the ozone season. This methodology is an appropriate way to approach the demonstration insomuch as it creates a conservative bias to the data. Barring a significant change in the pool of large affected units (i.e., the construction or addition of additional units that meet the definition of a large affected unit and that emit in excess of 3,300 tons of NOx during the ozone season), Indiana will meet its obligations to limit NOx emissions from large affected units to less than 9,777 tons of NOx per ozone season without additional measures needed.

In comments on the First Notice, many Non-EGU's requested that IDEM consider alternatives for the owners and operators of large affected units that would not require the operation and maintenance of continuous emissions monitoring ("CEMs") equipment pursuant to the requirements of 40 CFR Part 75 ("Part 75") in large part because of the resources (financial,

personnel and equipment) required to meet this obligation. Indeed, in its June 29, 2017, Notice¹ related to the *Renewal for the Information Collection Request for the NOx Budget Trading Program to Reduce the Regional Transport of Ozone* ("ICR"), the U.S. EPA indicates that there are 122 former NOx Budget Trading Program units (the large affected units like those impacted by this rulemaking) that will continue to conduct monitoring in accordance with Part 75 solely under the NOX SIP call. The Notice goes on to state the total estimated burden of the ICR is 57,586 hours per year and the total estimated cost is \$8,066,616 per year, which includes \$3,777,000 annualized capital or operation & maintenance costs.

The U.S. EPA's own data suggests that the cost to the owners of units obligated to comply with the operation and maintenance of CEMs pursuant to Part 75 solely for the purposes of proving that NOx emissions during the ozone season do not exceed the conservative estimates in the demonstration includes a labor burden of 472 hours per year *per unit* at an estimated average cost per unit of approximately \$66,000 per year.

In its response to comments on the First Notice on this point, IDEM indicated that "Part 75 monitoring requirements must remain in place to ensure continued compliance with NOx emission reduction requirements in the NOx SIP Call rule[.]" and "...keeping Part 75 monitoring in place is a *federal mandate* required for U.S. EPA approval of this rulemaking." (emphasis added). Based on other responses to comments on the First Notice, WPP believes that IDEM is referring to 40 CFR §51.121 that contains the obligations for the NOx Budget Trading Program and refers to monitoring pursuant to 40 CFR Part 75, Subpart H.

WPP understands that for purposes of allowance accounting under the ozone season NOx budget trading program, the Part 75 monitoring requirements were important to ensure quality assured CEM data was available. Indeed, because the NOx Authorized Account Representative was obligated to certify the emissions data during reconciliation and to ensure that sufficient allowances were held in compliance accounts, the owners and operators understood the need to have stringent monitoring requirements. In the current situation, however, IDEM's demonstration has illustrated that "...maximum ozone season emissions from large affected units are well below the NOx SIP Call budget." See Response to Comments Page 6 of 26.

Given IDEM's own statement that maximum ozone season emissions from large affected units are below the budget, and the on-going costs of monitoring, recordkeeping, and reporting under the Part 75 monitoring program as illustrated by U.S. EPA's ICR, WPP believes that it is in the best interest of the State of Indiana to find a way to implement this rule without continuing the requirement to operate Part 75 monitoring equipment on large affected units.

40 CFR Part 96 (referenced in 40 CFR §51.121) contains model regulations that, if a state adopted substantially identical, expedited review of the State Implementation Plan (SIP) submittal for the NOx Budget Trading Program. The obligations related to Part 75 monitoring stem from 40 CFR Part 96.

WPP would offer that this rulemaking, while intended to codify in state rules the ongoing obligations under 40 CFR §51.121 for large affected units, does not have to mirror 40 CFR

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¹ https://www.gpo.gov/fdsys/pkg/FR-2017-06-29/pdf/2017-13676.pdf

Part 96. Because there is (appropriately) no allowance trading program for NOx emissions for large affected units in Indiana, the need to require the stringent data obligations under Part 75 does not exist. Part 75 data was integral to allowance use, whether used by the owner when accounting for emissions or sold through the trading program to another user.

In this case, WPP believes that data produced through the suggested alternative approach would be of sufficient quality to ensure that emissions from large affected units do not exceed the budget, while at the same time minimizing the compliance cost burden for Indiana sources. WPP would like to note that the alternative it is asking IDEM to provide is nearly identical to what IDEM has proposed in this draft rule for boilers fired primarily by blast furnace gas.

Regardless of the methodology used to determine emissions, WPP appreciates that IDEM will need to have data from large affected units in order to satisfy its own obligations to ensure that emissions do not exceed the cap established in the NOx Budget Program.

WPP requests that IDEM reconsider the Part 75 requirement to submit electronic reports to the U.S. EPA through the *Emissions Collection and Monitoring Plan System* (ECMPS). Because Indiana's large affected units are not participating in the allowance trading program, there is no need for the types of data that is required to be reported through ECMPS, especially on an hour by hour basis. IDEM needs sufficient data to demonstrate the on-going validity of the demonstration. WPP believes this can be accomplished through a periodic report to IDEM and recommends that this report be an ozone season summary report that should be submitted no later than November 1st each calendar year.

We appreciate the opportunity to submit comments on this Second Notice. Should you have questions or wish to discuss this, please do not hesitate to contact me by phone at (812) 853-1141 or via e-mail at scott.darling@alcoa.com

Sincerely,

Scott M. Darling

Scott M. Darling EHS Manager Alcoa Power Generating Corp. – Warrick Power Plant

Message

Sent: 10/29/2018 2:48:24 PM

To: Svingen, Eric [Svingen.Eric@epa.gov]
Subject: RE: NOx SIP call monitoring proposed rule

I try. 🛈

From: Svingen, Eric

Sent: Monday, October 29, 2018 9:36 AM **To:** Arra, Sarah < Arra. Sarah@epa.gov>

Subject: RE: NOx SIP call monitoring proposed rule

That's a good tip, thanks Sarah. :)

Yeah, Louis emailed right away and I responded with the attachment.

From: Arra, Sarah

Sent: Monday, October 29, 2018 9:03 AM **To:** Svingen, Eric <<u>Svingen.Eric@epa.gov</u>>

Subject: RE: NOx SIP call monitoring proposed rule

You might want to include the attachment.

From: Svingen, Eric

Sent: Monday, October 29, 2018 8:39 AM **To:** Nichols, Louis < <u>Nichols.Louis@epa.gov</u>>

Cc: Aburano, Douglas <aburano.douglas@epa.gov>; Arra, Sarah <Arra.Sarah@epa.gov>

Subject: RE: NOx SIP call monitoring proposed rule

Louis -

Wisconsin gave us a heads-up that they've submitted a comment on CAMD's Part 75 proposed rule. You may already have this comment in hand, but if not, please see below.

Eric

From: Aburano, Douglas

Sent: Monday, October 29, 2018 8:23 AM

To: Arra, Sarah < Arra. Sarah@epa.gov >; Svingen, Eric < Svingen. Eric@epa.gov >

Subject: FW: NOx SIP call monitoring proposed rule

From: Bizot, David A - DNR [mailto:David.Bizot@wisconsin.gov]

Sent: Friday, October 26, 2018 10:44 AM

To: Aburano, Douglas **Subject:** NOx SIP call monitoring proposed rule

Hi Doug,

You asked to be notified if we intended to submit comments on this proposal. The attached comments were submitted yesterday. Please let me know if you have any questions.

Thanks,

David

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

David Bizot

Chief, Air Quality Planning and Standards Section Air Management Program Wisconsin Department of Natural Resources Phone: (608) 267-7543

Cell: (608) 286-8939 Fax: (608) 267-0560

David.Bizot@wisconsin.gov



Message

From: Harmon, Jack [JAHarmon@idem.IN.gov]

Sent: 9/1/2017 12:02:06 PM

To: Arra, Sarah [Arra.Sarah@epa.gov]

Subject: RE: some additional information for CAMD

Thanks for passing my comments along, Sarah. I look forward to hearing from you.

Have a great holiday weekend!

-Jack

From: Arra, Sarah [mailto:Arra.Sarah@epa.gov]
Sent: Thursday, August 31, 2017 3:27 PM
To: Bem, Susan <SBEM@idem.IN.gov>
Cc: Harmon, Jack <JAHarmon@idem.IN.gov>

Subject: RE: some additional information for CAMD

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Thank you, Susan. I will add this to the conversation. Jack, I also passed along your message from yesterday. I will keep the conversation moving and hope to loop you back into it in a few weeks. I am optimistic that we will be able to get a response to you well before the Nov. 1st date.

Thanks, Sarah

Sarah Arra Environmental Scientist Attainment Planning and Maintenance Section Air and Radiation Division- Region 5 Phone: 312-886-9401

From: Bem, Susan [mailto:SBEM@idem.IN.gov]
Sent: Thursday, August 31, 2017 2:16 PM
To: Arra, Sarah < Arra.Sarah@epa.gov >
Cc: Harmon, Jack < JAHarmon@idem.IN.gov >
Subject: some additional information for CAMD

Sarah -

I think the following information might be helpful for CAMD as they discuss some more internally and develop written responses. This information has been discussed in the past, so probably not new to them, but was not discussed on the call in this specific manner, and I wanted to make sure it was part of the discussion.

The July 2, 2001 Federal Register proposing approval of the NOx SIP Call rules as they existed at that time did not have any BFG units in the trading program for <u>final</u> adoption. Note that during the development stages of

the Indiana rules all the BFG units were in the trading program. The FR says that "IDEM did not envision these units contributing to the reductions required in the State, removing them from the trading program will have no net effect on the amount of total reductions achieved." "... these units are not contributing to the required reductions..." Table 4 in the November 8, 2001 FR for final SIP approval shows zero reductions to be achieved by the blast furnace gas units (comparing 2007 projected uncontrolled to 2007 budget). Some units later chose to be included in the trading program and there was subsequent rule changes and SIP approvals for moving a portion into the trading program.

Please let us know if you need any other information from us in the interim.

Thank you, Susan Bem Air Programs Branch - OAQ

- (r)(1) Notwithstanding any provisions of paragraph (p) of this section, subparts A through I of part 96 of this chapter, and any State's SIP to the contrary, the Administrator will not carry out any of the functions set forth for the Administrator in subparts A through I of part 96 of this chapter, or in any emissions trading program in a State's SIP approved under paragraph (p) of this section, with regard to any ozone season that occurs after September 30, 2008.
- (2) Except as provided in $\S51.123$ (bb) with regard to an ozone season that occurs before January 1, 2015, a State whose SIP is approved as meeting the requirements of this section and that includes an emissions trading program approved under paragraph (p) of this section must revise the SIP to adopt control measures that satisfy the same portion of the State's NO_x emission reduction requirements under this section as the State projected such emissions trading program would satisfy.

Message

From: Harmon, Jack [JAHarmon@idem.IN.gov]

Sent: 11/8/2017 7:01:25 PM

To: Arra, Sarah [Arra.Sarah@epa.gov]
CC: Susan Bem [sbem@idem.in.gov]

Subject: RE: Ohio enforcement langue for non-EGUs

Thanks, Sarah. As a reminder, you said you would send us the EPA comments to Ohio leading up to this language. After we read your correspondence, we will circle our group and I will be in touch.

Thanks! -Jack

From: Arra, Sarah [mailto:Arra.Sarah@epa.gov] Sent: Wednesday, November 08, 2017 1:10 PM

To: Bem, Susan <SBEM@idem.IN.gov>; Harmon, Jack <JAHarmon@idem.IN.gov>; Boling, Jean <JBoling@idem.IN.gov>;

Reiss, Jessica <JReiss@idem.IN.gov>

Cc: Svingen, Eric <Svingen.Eric@epa.gov>; Aburano, Douglas <aburano.douglas@epa.gov>

Subject: Ohio enforcement langue for non-EGUs

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

- (b) For non-EGUs: Ohio's state program budget for non-EGUs is four thousand twenty-eight tons of NOx for each control period for units under paragraph (C)(1)(b) of this rule. The sum of the total number of tons of NOx emitted from the NOx budget units under paragraph (C)(1)(b) of this rule for the control period plus the sum of the NOx emission limitations (in tons) for each unit exempt under paragraph (C)(2) of this rule shall be less than or equal to the state program budget for non-EGUs.
- (i) Unless all NOx budget units under paragraph (C)(1)(b) of this rule are exempt under paragraph (C)(2) of this rule, by May 1 of each year, Ohio EPA will conduct an annual review of actual NOx emissions during the previous control period from all NOx budget units under paragraph (C)(1)(b) of this rule, including any new units, to ensure the total emissions remain below the state program budget for non-EGUs.
- (ii) Should the total emissions for the control period exceed the state program budget for non-EGUs, Ohio EPA will, within one year of determining the exceedance of the state program budget, submit a revised state implementation plan to the United states environmental protection agency which compensates for the budget shortfall and ensures the state program budget is met in future years.

POLLUTION CONTROL BOARD

NOTICE PROPOSED AMENDMENTS

TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE B: AIR POLLUTION CHAPTER I: POLLUTION CONTROL BOARD SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 225 CONTROL OF EMISSIONS FROM LARGE COMBUSTION SOURCES

SUBPART A: GENERAL PROVISIONS

Section	
225.100	Severability
225.120	Abbreviations and Acronyms
225.130	Definitions
225.140	Incorporations by Reference

SUBPART B: CONTROL OF MERCURY EMISSIONS FROM COAL-FIRED ELECTRIC GENERATING UNITS

Section	
225.200	Purpose
225.202	Measurement Methods
225.205	Applicability
225.210	Compliance Requirements
225.220	Clean Air Act Permit Program (CAAPP) Permit Requirements
225.230	Emission Standards for EGUs at Existing Sources
225.232	Averaging Demonstrations for Existing Sources
225.233	Multi-Pollutant Standard (MPS)
225.234	Temporary Technology-Based Standard for EGUs at Existing Sources
225.235	Units Scheduled for Permanent Shut Down
225.237	Emission Standards for New Sources with EGUs
225.238	Temporary Technology-Based Standard for New Sources with EGUs
225.240	General Monitoring and Reporting Requirements
225.250	Initial Certification and Recertification Procedures for Emissions Monitoring
225.260	Out of Control Periods for Emission Monitors
225.261	Additional Requirements to Provide Heat Input Data
225.263	Monitoring of Gross Electrical Output
225.265	Coal Analysis for Input Mercury Levels
225.270	Notifications

POLLUTION CONTROL BOARD

	NOTICE PROPOSED AMENDMENTS
225.290	Recordkeeping and Reporting
225.291	Combined Pollutant Standard: Purpose
225.292	Applicability of the Combined Pollutant Standard
225.293	Combined Pollutant Standard: Notice of Intent
225.294	Combined Pollutant Standard: Control Technology Requirements and Emissions
	Standards for Mercury
225.295	Combined Pollutant Standard: Emissions Standards for NO _x and SO ₂
225.296	Combined Pollutant Standard: Control Technology Requirements for NOx, SO2,
	and PM Emissions
225.297	Combined Pollutant Standard: Permanent Shut-Downs
225.298	Combined Pollutant Standard: Requirements for NO _x and SO ₂ Allowances
225.299	Combined Pollutant Standard: Clean Air Act Requirements

SUBPART C: CLEAN AIR ACT INTERSTATE RULE (CAIR) SO₂ TRADING PROGRAM

Section	
225.300	Purpose
225.305	Applicability
225.307	Sunset Provisions
225.310	Compliance Requirements
225.315	Appeal Procedures
225.320	Permit Requirements
225.325	Trading Program

SUBPART D: CAIR NO_x ANNUAL TRADING PROGRAM

Section	
225.400	Purpose
225.405	Applicability
225.407	Sunset Provisions
225.410	Compliance Requirements
225.415	Appeal Procedures
225.420	Permit Requirements
225.425	Annual Trading Budget
225.430	Timing for Annual Allocations
225.435	Methodology for Calculating Annual Allocations
225.440	Annual Allocations
225.445	New Unit Set-Aside (NUSA)
225.450	Monitoring, Recordkeeping and Reporting Requirements for Gross Electrical
	Output and Useful Thermal Energy
225.455	Clean Air Set-Aside (CASA)

POLLUTION CONTROL BOARD

	NOTICE PROPOSED AMENDMENTS
225.460	Energy Efficiency and Conservation, Renewable Energy, and Clean Technology
	Projects
225.465	Clean Air Set-Aside (CASA) Allowances
225.470	Clean Air Set-Aside (CASA) Applications
225.475	Agency Action on Clean Air Set-Aside (CASA) Applications
225.480	Compliance Supplement Pool
	SUBPART E: CAIR NO _x OZONE SEASON TRADING PROGRAM
Section	
225.500	Purpose
225.505	Applicability
225.507	Sunset Provisions
225.510	Compliance Requirements
225.515	Appeal Procedures
225.520	Permit Requirements
225.525	Ozone Season Trading Budget
225.530	Timing for Ozone Season Allocations
225.535	Methodology for Calculating Ozone Season Allocations
225.540	Ozone Season Allocations
225.545	New Unit Set-Aside (NUSA)
225.550	Monitoring, Recordkeeping and Reporting Requirements for Gross Electrical Output and Useful Thermal Energy
225.555	Clean Air Set-Aside (CASA)
225.560	Energy Efficiency and Conservation, Renewable Energy, and Clean Technology Projects
225.565	Clean Air Set-Aside (CASA) Allowances
225.570	Clean Air Set-Aside (CASA) Applications
225.575	Agency Action on Clean Air Set-Aside (CASA) Applications
	SUBPART F: COMBINED POLLUTANT STANDARDS
225.600	Purpose (Repealed)
225.605	Applicability (Repealed)
225.610	Notice of Intent (Repealed)
225.615	Control Technology Requirements and Emissions Standards for Mercury (Repealed)
225.620	Emissions Standards for NO _x and SO ₂ (Repealed)
225.625	Control Technology Requirements for NO _x , SO ₂ , and PM Emissions (Repealed)
225.630	Permanent Shut-Downs (Repealed)
225.635	Requirements for CAIR SO ₂ , CAIR NO _x , and CAIR NO _x Ozone Season Allowances (Repealed)

POLLUTION CONTROL BOARD

NOTICE PROPOSED AMENDMENTS

225.640 Clean Air Act Requirements (Repealed) 225.APPENDIX A Specified EGUs for Purposes of the CPS Midwest Generation's Coal-
Fired Boilers as of July 1, 2006)
225 APPENDIX B Continuous Emission Monitoring Systems for Mercury
225.EXHIBIT A Specifications and Test Procedures 225. EXHIBIT B Quality Assurance and Quality Control Procedures
225. EXHIBIT C Conversion Procedures
225 EXHIBIT D Quality Assurance and Operating Procedures for Sorbent Trap Monitoring Systems
AUTHORITY: Implementing and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/27].
SOURCE: Adopted in R06-25 at 31 Ill. Reg. 129, effective December 21, 2006; amended in R06-26 at 31 Ill. Reg. 12864, effective August 31, 2007; amended in R09-10 at 33 Ill. Reg. 10427, effective June 26, 2009; amended in R15-21 at 39 Ill. Reg. 16225, effective December 7, 2015; amended in R, at Ill. Reg, effective
SUBPART C: CLEAN AIR ACT INTERSTATE RULE (CAIR) SO ₂ TRADING PROGRAM <u>Section 225.307 Sunset Provisions</u>
The provisions of this Subpart C shall not apply to any control period that begins after January 1,
<u>2017.</u>
(Source: Added at Ill. Reg, effective)
SUBPART D: CAIR NO _x ANNUAL TRADING PROGRAM
Section 225.407 Sunset Provisions
The provisions of this Subpart D shall not apply to any control period that begins after January 1, 2017.
(Source: Added at Ill. Reg, effective)
SUBPART E: CAIR NO _x OZONE SEASON TRADING PROGRAM

Section 225.507 Sunset Provisions

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POLLUTION CONTROL BOARD

NOTICE PROPOSED AMENDMENTS

The provisions of	this Subpart E sl	all not apply	to any contro	l period that begin	s after January 1,
2017.	-		<u> </u>		

(S	ource:	Added	at	III.	Reg.	,	effective	
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TITLE 326 AIR POLLUTION CONTROL DIVISION

Proposed Rule

LSA Document #15-414

DIGEST

Adds <u>326 IAC 10-2</u> and amends <u>326 IAC 10-3-1</u> and <u>326 IAC 10-3-3</u>, concerning nitrogen oxides (NO₂) emissions from large affected units. Repeals <u>326 IAC 10-4</u>, <u>326 IAC 24-3-1</u>, <u>326 IAC 24-3-2</u>, <u>326 IAC 24-3-4</u>, and <u>326 IAC 24-3-11</u>. Effective 30 days after filing with the Publisher.

HISTORY

First Notice of Comment Period: December 9, 2015, Indiana Register (DIN: <u>20151209-IR-326150414FNA</u>). Second Notice of Comment Period: July 5, 2017, Indiana Register (DIN: <u>20170705-IR-326150414SNA</u>). Notice of First Hearing: July 5, 2017, Indiana Register (DIN: <u>20170705-IR-326150414PHA</u>).

Change in Notice of Public Hearing: November 1, 2017, Indiana Register (DIN:

20171101-IR-326150414CHA).

Date of First Hearing: January 10, 2018.

PUBLIC COMMENTS UNDER IC 13-14-9-4.5

<u>IC 13-14-9-4.5</u> states that a board may not adopt a rule under <u>IC 13-14-9</u> that is substantively different from the draft rule published under <u>IC 13-14-9-4</u>, until the board has conducted a third comment period that is at least 21 days long.

REQUEST FOR PUBLIC COMMENTS

Portions of this proposed rule are substantively different from the draft rule published on July 5, 2017, at DIN: <u>20170705-IR-326150414SNA</u>. The Indiana Department of Environmental Management (IDEM) is requesting comment on the following portions of the proposed (preliminarily adopted) rule that are substantively different from the language contained in the draft rule.

The United States Environmental Protection Agency (U.S. EPA) has indicated that the blast furnace gas-fired units that were formerly part of the NO budget trading program and Clean Air Interstate Rule (CAIR) rules do not need to be included in the replacement rule for large affected units. Therefore, blast furnace gas unit requirements were moved from 326 IAC 10-2 (NO Emissions from Large Affected Units) to 326 IAC 10-3 (Nitrogen Oxide Reduction for Specific Source Categories). U.S. EPA also requested additional language in 326 IAC 10-2-9 (Ozone Season NO Budget) of the proposed rule to show the ozone season NO budget, and to require the department to conduct an annual compliance review of actual NO emissions to ensure that the total emissions remain below the ozone season budget.

The following sections of the proposed rule are substantively different from the draft rule:

326 IAC 10-2-9

326 IAC 10-3-1

326 IAC 10-3-3

The section with specific requirements for blast furnace gas units appeared in the draft rule at <u>326 IAC 10-2-7</u>, but was deleted from the proposed (preliminarily adopted) rule.

This notice requests the submission of comments on the sections of the rule listed above, including suggestions for specific amendments to those sections. These comments and the department's responses thereto will be presented to the board for its consideration at final adoption under <u>IC 13-14-9-6</u>. Comments on additional sections of the proposed rule that the commentor believes are substantively different from the draft rule may also be submitted for the consideration of the board. Comments may be submitted in one of the following ways:

(1) By mail or common carrier to the following address:

LSA Document #15-414 NO Emissions from Large Affected Units

Jack Harmon

Rules Development Branch

Office of Legal Counsel

Indiana Department of Environmental Management

Indiana Government Center North

100 North Senate Avenue

Indianapolis, IN 46204-2251

(2) By facsimile to (317) 233-5970. Please confirm the timely receipt of your faxed comments by calling the Rules Development Branch at (317) 233-8903.

DIN: 20180131-IR-326150414PRA

(3) By electronic mail to jaharmon@idem.in.gov. To confirm timely delivery of your comments, please request a document receipt when you send the electronic mail. PLEASE NOTE: Electronic mail comments will

NOT be considered part of the official written comment period unless they are sent to the address indicated in this notice.

(4) Hand delivered to the receptionist on duty at the thirteenth floor reception desk, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana.

Regardless of the delivery method used, to properly identify each comment with the rulemaking action it is intended to address, each comment document must clearly specify the LSA document number of the rulemaking you are commenting on.

COMMENT PERIOD DEADLINE

All comments must be postmarked, faxed, or time stamped not later than February 21, 2018. Hand-delivered comments must be delivered to the appropriate office by 4:45 p.m. on the above-listed deadline date.

Additional information regarding this action may be obtained from Jack Harmon, Rules Development Branch, Office of Legal Counsel, (317) 234-9535 or (800) 451-6027 (in Indiana).

SUMMARY/RESPONSE TO COMMENTS FROM THE SECOND COMMENT PERIOD

IDEM requested public comment from July 5, 2017, through August 4, 2017, on IDEM's draft rule language. IDEM received comments from the following parties:

Citizens Energy Group (Citizens)

Alcoa Power Generating Inc. - Warrick Power Plant (WPP)

ArcelorMittal USA LLC (ArcelorMittal)

Following is a summary of the comments received and IDEM's responses thereto:

Comment: IDEM's demonstration indicated that potential NO emissions from the large affected units are less than 6,400 tons per ozone season, significantly lower than the established budget. IDEM's methodology used in its demonstration of compliance for the potential NO emissions from the large affected units vastly overestimated the actual emissions. As sources convert from coal-fired operations to natural gas-fired operation, for example, actual emissions are significantly reduced. These factors are not reflected in the demonstration, resulting in a conservative bias as to the estimation of the actual versus budget comparison. The conservative bias of this approach supports the position that ozone season NO emissions from the large affected units will not exceed the budget established by the U.S. EPA. Commenters requested IDEM to update its compliance demonstration. (Citizens, WPP)

Comment: ArcelorMittal agrees with IDEM's conclusion that large affected units will not exceed the 9,777-ton ozone season NO budget in any future year. IDEM correctly concludes that new mass emission limits and control measures on large affected units are not necessary to meet the state's NO_SIP Call obligation. (ArcelorMittal)

Response: IDEM must provide to U.S. EPA a demonstration showing that the NO emissions from the large affected units do not exceed the budget that was established through the NO Trading Program. The method of demonstration is not a part of this rulemaking. However, IDEM is preparing a new budget demonstration and will submit it separately to U.S. EPA for approval in the Indiana State Implementation Plan (SIP). Because the demonstration is a separate process, it will have a separate public comment period. Affected sources are invited to share their comments on the methodology during that comment period.

Comment: Adding emission limits or mandating control measures for individual sources after such a cooperative program has succeeded undermines these programs and creates disincentives that could jeopardize the success of future trading programs.

IDEM's proposed approach preserves the cap on total NO emissions from large affected units in accordance with its NO SIP Call obligations and provides the protection the SIP Call determined was necessary to address impacts on downwind states. This approach preserves both air quality and economic opportunity in Indiana. (ArcelorMittal)

Response: IDEM agrees that individual units do not need mass emission limits, and units still subject to the NO SIP Call are still subject to the overall emissions cap for demonstration of compliance to the SIP Call.

^x Comment: In its response to comments on the First Notice on this point, IDEM indicated that "Part 75 monitoring requirements must remain in place to ensure continued compliance with NO emission reduction requirements in the NO SIP Call rule," and "...keeping Part 75 monitoring in place is a federal mandate required for U.S. EPA approval of this rulemaking." We believe that IDEM is referring to 40 CFR 51.121 that contains the obligations for the NO Budget Trading Program and refers to monitoring pursuant to 40 CFR Part 75, Subpart H. (Citizens, WPP)

Comment: Given IDEM's own statement that maximum ozone season emissions from large affected units are below the budget, and the ongoing costs of monitoring, record keeping, and reporting under the Part 75 monitoring program as illustrated by U.S. EPA's Information Collection Request (ICR), we believe that it is in the best interest of the State of Indiana to find a way to implement this rule without continuing the requirement to operate Part 75 monitoring equipment on large affected units. (Citizens, WPP)

Response: In consultation with U.S. EPA, IDEM is proposing that the 40 CFR Part 75 (Part 75 monitoring) requirements remain in the draft rule proposed for preliminary adoption. It is IDEM's intent to adopt rule revisions

that will be approved by U.S. EPA into the Indiana SIP. The current requirements for Part 75 monitoring for large affected units are included in the state Clean Air Interstate Rules (CAIR) at 326 IAC 24-3 and are part of the Indiana SIP. If U.S. EPA does not approve a SIP revision removing these requirements for large affected units, the Part 75 requirements that currently apply to large affected units would still be federally enforceable. U.S. EPA has indicated that they are evaluating changes to 40 CFR 51.121. If U.S. EPA makes changes to those requirements, IDEM will reevaluate the state rules at that time. IDEM is willing to work with the affected sources to alleviate the burden of 40 CFR Part 75 monitoring, through mechanisms such as the low mass emissions (LME) provisions of Part 75.

U.S. EPA has reviewed Indiana's draft rule language and the comments provided by affected parties during the Second Notice of Public Comment Period. U.S. EPA states that under 40 CFR 51.121(i)(4), where the SIP adopted by a state to meet the requirements of the NO_SIP Call imposes control measures on certain types of sources, including the types of sources comprising Indiana's large affected units, as a means of meeting the state's NO_budget, then the SIP must require the sources to monitor and report ozone season NO_emissions in accordance with 40 CFR Part 75. The monitoring and reporting requirement in 40 CFR 51.121(i)(4) is not linked to any specific form of enforceable control measure, but is triggered simply by Indiana's choice of the sources relied on to meet the state's NO_budget in the state's original SIP addressing the NO_SIP Call. As discussed above, the requirement for enforceable control measures does not lapse simply because the same measures are no longer used, and consequently the requirement for Part 75 monitoring and reporting does not lapse either. Like the original control measures, the replacement measures do not have to be source-specific mass emission caps or rate limits, but could be collective caps instead.

Comment: 40 CFR Part 96 (referenced in 40 CFR 51.121) contains model regulations that, if a state adopted substantially identical regulations, U.S. EPA could expedite the review and approval of the SIP submittal for the NO Budget Trading Program. The obligations related to Part 75 monitoring stem from 40 CFR 96.

^x This rulemaking, while intended to codify in state rules the ongoing obligations under 40 CFR 51.121 for large affected units, does not have to mirror 40 CFR 96. Because there is (appropriately) no allowance trading program for NO emissions for large affected units in Indiana, the need to require the stringent data obligations under Part 75 does not exist. Part 75 data was integral to allowance use, whether used by the owner when accounting for emissions or sold through the trading program to another user. (Citizens, WPP)

Response: While the draft rule language mirrors the model language in 40 CFR 96 in regards to the Part 75 monitoring requirements it does so because 40 CFR 51.121 at this time requires this type of monitoring whether or not the units are subject to a trading program and the 40 CFR 96 language provides an example for drafting the language in this rulemaking.

Comment: In the absence of a trading program for non-EGU units, IDEM is only required to assess whether the collective emissions from the large affected units exceed the overall NO_SIP Call budget. IDEM has properly determined that the budget is 35 percent higher than the maximum ozone-season NO_rate from all the large affected units combined. There is no need for minute-by-minute or even hour-by-hour NO_emissions information when the relevant compliance measure is the collective emissions from all large affected units over the course of the ozone season. The new scheme that IDEM is implementing in this proposed rule does not warrant the significant burdens associated with Part 75 monitoring—which include some of the most rigorous testing and verification procedures for any monitoring devices under the Clean Air Act.

Part 75 penalizes a source for monitor downtime by requiring assumed NO emission rates that far exceed actual NO emission rates. See 40 CFR §§ 75.31(c), (d), 75.33(c), (d). ArcelorMittal is finding that older CEMS experience more downtime and, therefore, the Part 75 penalty for downtime is an increasingly significant component of the ozone-season NO calculation for its large affected units sources. This may have been justified as an incentive to properly monitor under a trading program when a source may purchase NO allowances to cover the elevated assumed gap-filling emission rates. However, now that trading is over for large affected units, this Part 75 assumption interferes with IDEM's obligation to accurately estimate ozone-season emissions for large affected units. We encourage IDEM to embrace this opportunity to remove burdensome monitoring requirements that are no longer needed or required to generate the information necessary to demonstrate compliance with the large affected units NO budget. (ArcelorMittal)

Response: Even though emissions information collected through Part 75 monitoring will overestimate emissions, Indiana is far enough below the budget that the sources as a group will still be able to meet the budget. The concern with resources required to monitor under 40 CFR 75 is addressed in the response to other comments.

Comment: IDEM has the opportunity to provide relief, in addition to the requirements proposed for the steel mills blast furnace gas units, from the significant Part 75 costs that similar sources in other states are not required to pay, and to extend relief from these costs to all large affected units no longer subject to NO control measures. IDEM should offer large affected units a choice among approved monitoring alternatives. Even if IDEM believes there is a risk that control measures will be required in the future, the decision to continue Part 75 monitoring or choose a less costly alternative until a control measure is imposed is a decision that should be left to each affected source in the absence of a legal mandate.

IDEM could offer large affected units the option of shifting to a reliable monitoring methodology that is less burdensome and costly than Part 75 monitoring currently required in Section 3 of the proposed rules. Additionally, IDEM may offer an additional exception that allows a source that is no longer subject to a trading program, or a source that is not subject to a NO control measure to monitor NO emissions during the ozone season to use an approved alternate monitoring method other than Part 75. (Arcelor Mittal)

Comment: We would encourage IDEM to consider an approach to monitoring that provides options to the owners/operators that produce data needed to provide the ongoing assurances but allows the owners and operators of large affected units a way to reduce operational and maintenance expenses. IDEM could propose as an alternative monitoring approach the use of an emission factor based on historic CEMs data with fuel to develop a mass emission rate. We believe that such an approach would be defensible to U.S. EPA but also addresses the significant costs of Part 75 monitoring, allowing limited resources to be focused where they provide a greater benefit than monitoring for the sake of monitoring. (Citizens)

Response: Removing Part 75 monitoring is not an option allowed by U.S. EPA at this time; therefore, in order to have a rule revision that is approvable by U.S. EPA, no changes to these requirements have been made.

Comment: Data produced through the suggested alternative approach would be of sufficient quality to ensure that emissions from large affected units do not exceed the budget, while at the same time minimizing the compliance cost burden for Indiana sources. The alternative that IDEM is being asked to provide is nearly identical to what IDEM has proposed in this draft rule for boilers fired primarily by blast furnace gas. (Citizens, WPP)

Comment: IDEM should reconsider the Part 75 requirement to submit electronic reports to the U.S. EPA through the Emissions Collection and Monitoring Plan System (ECMPS) required by Part 75. Because Indiana's large affected units are not participating in the allowance trading program, there is no need for the types of data that is required to be reported through ECMPS, especially on an hour by hour basis. IDEM needs sufficient data to demonstrate the ongoing validity of the demonstration. This can be accomplished through a periodic report to IDEM and this report will be an ozone season summary report that should be submitted no later than November 1st each calendar year. (Citizens, WPP)

Response: The blast furnace gas units are treated differently than the other large affected units that were in the trading program because emissions from the blast furnace gas units were not used in the emission reductions needed for the NO_SIP Call. Using emission estimates for units that are not fired primarily by blast furnace gas to show compliance with the NO_ozone season budget is not an option allowed by U.S. EPA.

Comment: ArcelorMittal agrees that federal rules do not require Part 75 monitoring for blast furnace gas-fired units and supports IDEM's exemption in 326 IAC 10-2-7 as proposed. ArcelorMittal supports using common language for 326 IAC 10-3 and 326 IAC 10-2-7 so that blast furnace gas-fired units are treated similarly whether or not they participated in the trading program. IDEM appropriately excludes temporary blast furnace gas interruptions, startups and malfunctions from the obligation to ensure that an exempt unit meets the 50% blast furnace gas threshold. These are circumstances when natural gas may be needed to temporarily sustain steam flow. The cost and burden of Part 75 monitoring (discussed more completely below) should not be imposed based on these periods outside of normal boiler operating conditions and when blast furnace gas supply is temporarily interrupted. ArcelorMittal supports IDEM's choice to apply a consistent monitoring approach across all blast furnace gas-fired units recognizing that Part 75 monitoring is not required for these non-fossil fuel-fired units.

Federal rules direct that each state's SIP revision submitted under 40 CFR 51.121(a) to comply with the "Good Neighbor" provisions at section 110(a)(2)(D)(i)(I) of the Clean Air Act must require Part 75 monitoring for fossil fuel-fired NO_x sources subject to control measures under the SIP revision. Blast furnace gas is not a fossil fuel. Blast furnace gas is a product of a chemical reaction involving iron oxide in a blast furnace used to convert iron ore into molten iron. Importantly, blast furnace gas has significantly lower NO_x emissions than fossil fuels. See The Making, Shaping and Treating of Steel (10th ed.), at 577 (presenting blast furnace operational reaction equation nos. (3)–(8)); see also Letter from George R. Stevens, Acting Chief Compliance Monitoring Branch, DSSE, EPA to Bruce Miller, Technical Advisor, Air Engineering Branch, Region IV, EPA (June 16, 1976) (finding that blast furnace gas is not a fossil fuel). (ArcelorMittal)

Response: IDEM appreciates the support for consistent regulations for all blast furnace gas units. U.S. EPA does not agree that blast furnace gas is not considered a fossil fuel. The definition of fossil fuel within the NO Budget Trading Program rules includes not only natural gas, petroleum, and coal, but also "any form of solid," liquid, or gaseous fuel derived from such material." U.S. EPA concludes that blast furnace gas is derived from coal and meets the relevant definition of "fossil fuel." U.S. EPA has historically treated blast furnace gas-fired units as NO Budget Trading Program sources. In Indiana's initial SIP submission addressing the NO SIP Call, these units were included in the trading program. Subsequent changes removed some of these units from the trading program, and regulated them as units with individual emission limits. SIP approval of either the trading program rule or the individual emission limit rule was based on whether or not these units were used to meet the budget caps, and not based on whether they were or were not considered to be a fossil fuel-fired unit.

As stated early in this rulemaking, IDEM committed to working with U.S. EPA to obtain feedback on the proposed rule language for blast furnace gas units. U.S. EPA has stated that they agree that the SIP provisions

initially submitted by Indiana to address the state's obligations under the NO_SIP Call did not rely on emission reductions from any of the state's blast furnace gas-fired units to meet the state's overall emission reduction requirements. Their emissions were explicitly represented at projected uncontrolled emission levels in the state's overall NO_SIP Call budget, that is, the budget consisting of NO_budget trading program and non-NO_budget program emissions combined. U.S. EPA acknowledged Indiana's unique treatment of blast furnace gas-fired units in the proposed and final SIP approvals. In the subsequent SIP revision where Indiana brought some of the blast furnace gas-fired units into the NO_Budget Trading Program, the approved adjustment to the NOx trading program budget was similarly computed based on the state's allocated shares to those units of the projected uncontrolled emissions of all the blast furnace gas-fired units. As a result, the state did not rely on emission reductions from these blast furnace gas-fired units in the approved SIP provisions adopted to meet its NO_SIP Call obligations; therefore, U.S. EPA agrees that ongoing enforceable control measures for these units are not required under 40 CFR 51.121(f)(2).

U.S. EPA has also stated that if Indiana is going to exclude these units and meet the ongoing NO_SIP Call requirements for the remaining large affected units through the use of a collective cap, the cap for the remaining units would need to be adjusted to reflect the removal of the blast furnace gas-fired units, reversing the increase in the NO_budget trading program budget that was implemented when Indiana added those blast furnace gas-fired units to the NO_budget trading program. IDEM is revising the budget demonstration and will share it with affected sources when it is available.

Since U.S. EPA has provided feedback that the blast furnace gas-fired units do not need to be included in the replacement rule for large affected units that were formerly part of the NO_budget trading program and CAIR rules, IDEM is proposing changes to the rule proposed for preliminary adoption. IDEM is proposing that all blast furnace gas units be regulated by 326 IAC 10-3. This reduces the need to regulate the same type of units by both 326 IAC 10-2 and 326 IAC 10-3. However, with the inclusion of all units in 326 IAC 10-3, all units will be subject to a NO_ozone season emission limit of 0.17 pounds (lbs) NO_/MMBtu using an emission factor to calculate compliance. As part of the Third Comment Period for this rulemaking, IDEM will ask for comment on whether the compliance mechanisms for the emission factor within 326 IAC 10-3 should include the data that was obtained when these units were subject to Part 75 monitoring.

SUMMARY/RESPONSE TO COMMENTS RECEIVED AT THE FIRST PUBLIC HEARING

On January 10, 2018, the Environmental Rules Board (board) conducted the first public hearing/board meeting concerning the development of a new rule at 326 IAC 10-2, amendments to 326 IAC 10-3-1 and 326 IAC 10-3-3, and the repeal of 326 IAC 10-4, 326 IAC 24-3-1, 326 IAC 24-3-2, 326 IAC 24-3-4, and 326 IAC 24-3-11. No comments were made at the first hearing.

326 IAC 10-2; 326 IAC 10-3-1; 326 IAC 10-3-3; 326 IAC 10-4; 326 IAC 24-3-1; 326 IAC 24-3-2; 326 IAC 24-3-4; 326 IAC 24-3-11

SECTION 1. 326 IAC 10-2 IS ADDED TO READ AS FOLLOWS:

Rule 2. NO, Emissions from Large Affected Units

326 IAC 10-2-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

- Sec. 1. (a) The owner or operator of a unit, as defined in section 2 of this rule, that meets the applicability requirements in subsection (b) shall comply with the nitrogen oxide (NO $_{\rm x}$) monitoring, record keeping, and reporting requirements in sections 3 through 8 of this rule, unless the unit is subject to:
 - (1) the CSAPR NO_x Ozone Season Group 2 Trading Program established under 40 CFR 97, Subpart
 - (2) an equivalent trading program established under regulations approved as a state implementation plan revision under 40 CFR 52.38(b)(9);
 - (3) 326 IAC 10-3-1(a)(2); or
 - (4) 326 IAC 10-3-1(a)(3).
 - (b) This rule applies to the owner or operator of a unit that meets the following criteria:
 - (1) For a cogeneration unit that has a maximum design heat input capacity of greater than two hundred fifty (250) million British thermal units (MMBtu) per hour, the following:
 - (A) For a unit commencing operation before January 1, 1997, a unit that qualified as an unaffected

unit under the acid rain program, in 40 CFR 72.6(b)(4), for 1995 and 1996.

- (B) For a unit commencing operation on or after January 1, 1997, and before January 1, 1999, a unit that qualified as an unaffected unit under the acid rain program, in 40 CFR 72.6(b)(4), for 1997 and 1998.
- (C) For a unit commencing operation on or after January 1, 1999, a unit qualifying as an unaffected unit under the acid rain program, in 40 CFR 72.6(b)(4), for each year beginning 1999.
- (2) For a unit that is not a cogeneration unit and that has a maximum design heat input capacity of greater than two hundred fifty (250) MMBtu per hour, the following:
 - (A) For a unit commencing operation before January 1, 1997, a unit that did not serve a generator producing electricity for sale under a firm contract to the electric grid during 1995 or 1996.
 - (B) For a unit commencing operation on or after January 1, 1997, and before January 1, 1999, a unit that did not serve a generator producing electricity for sale under a firm contract to the electric grid during 1997 or 1998.
 - (C) For a unit commencing operation on or after January 1, 1999, a unit that at:
 - (i) no time serves a generator producing electricity for sale; or
 - (ii) any time serves a generator producing electricity for sale, if the generator has a nameplate capacity of twenty-five (25) megawatt electrical (MWe) output or less and has the potential to use no more than fifty percent (50%) of the potential electrical output capacity of the unit.
- (3) For a cogeneration unit serving a generator with a nameplate capacity greater than twenty-five (25) MWe, the following:
 - (A) For a unit commencing operation before January 1, 1997, a unit that failed to qualify as an unaffected unit under the acid rain program, in 40 CFR 72.6(b)(4), for 1995 and 1996.
 - (B) For a unit commencing operation on or after January 1, 1997, and before January 1, 1999, a unit that failed to qualify as an unaffected unit under the acid rain program, in 40 CFR 72.6(b)(4), for 1997 and 1998.
 - (C) For a unit commencing operation on or after January 1, 1999, a unit failing to qualify as an unaffected unit under the acid rain program, in 40 CFR 72.6(b)(4), for any year.
- (4) For a unit that is not a cogeneration unit serving a generator with a nameplate capacity greater than twenty-five (25) MWe, the following:
 - (A) For a unit commencing operation before January 1, 1997, a unit that served a generator during 1995 or 1996 that produced electricity for sale under a firm contract to the electric grid.
 - (B) For a unit commencing operation on or after January 1, 1997, and before January 1, 1999, a unit that served a generator during 1997 or 1998 that produced electricity for sale under a firm contract to the electric grid.
 - (C) For a unit commencing operation on or after January 1, 1999, a unit serving a generator at any time that produced electricity for sale.
- (5) For purposes of this rule, "electricity for sale under a firm contract to the electric grid" means electricity for sale where the capacity involved is intended to be available at all times during the period covered by a guaranteed commitment to deliver, even under adverse conditions.
- (c) Any provision of this rule that applies to the designated representative of a large affected unit also applies to the owners or operators of the unit.

(Air Pollution Control Division; 326 IAC 10-2-1)

326 IAC 10-2-2 Definitions

Authority: IC 13-14-8: IC 13-17-3-4: IC 13-17-3-11

Affected: IC 13-11-2; IC 13-15; IC 13-17

- Sec. 2. (a) For purposes of complying with the requirements of this rule, the definitions in this rule and 40 CFR 72.2* apply and take precedence in any conflict between these definitions and 326 IAC 1-2.
- (b) The term "affected unit" in 40 CFR 75* is replaced by the term "large affected unit" as defined in this section.
- (c) In addition to the definitions in <u>IC 13-11-2</u>, <u>326 IAC 1-2</u>, and 40 CFR 72.2*, the following definitions apply throughout this rule:
 - (1) "Boiler" means an enclosed combustion device used to produce heat and to transfer heat to

recirculating water, steam, or other medium.

- (2) "Cogeneration unit" means a unit that has equipment used to produce electric energy and forms of useful thermal energy (such as heat or steam) for industrial, commercial, heating, or cooling purposes, through the sequential use of energy, where "sequential use of energy" means the use of reject heat from:
 - (A) electricity production in a useful thermal energy application or process; or
 - (B) a useful thermal energy application or process in electricity production.
- (3) "Combined cycle system" means a system comprised of one (1) or more combustion turbines, heat recovery steam generators, and steam turbines, configured to improve overall efficiency of electricity generation or steam production.
- (4) "Combustion turbine" means:
 - (A) an enclosed device comprising a compressor, a combustor, and a turbine, in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and
 - (B) any associated duct burner, heat recovery steam generator and steam turbine, if the enclosed device under clause (A) is combined cycle.
- (5) "Commencing commercial operation" means, with regards to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, subject to the following:
 - (A) For a unit that is a large affected unit, on the date the unit commences commercial operation, the date remains the unit's date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or repowered.
 - (B) For a unit that is not a large affected unit, on the date the unit commences commercial operation, the date that the unit becomes a large affected unit, as defined under subdivision 11, is the unit's date of commencement of commercial operation.
 - (C) Except as provided in clauses (A) and (B), for a unit not serving a generator producing electricity for sale, the unit's date of commencement of operation is the unit's date of commencement of commercial operation.
- (6) "Commencing operation" means the following:
 - (A) A unit commences operation on either the date:
 - (i) of commencement of any mechanical, chemical, or electronic process, including start-up of a unit's combustion chamber; or
 - (ii) a unit meets the applicability criteria in section 1 of this rule, if the unit was in operation prior to the date on which it met the applicability criteria in section 1 of this rule.
 - (B) A unit that undergoes a physical change after the date the unit commences operation, other than replacement of the unit by a unit at the same source, retains the unit's date of commencement of operation, and is treated as the same unit.
 - (C) A unit that is replaced by a unit at the same source, such as repowered, after the date the unit commences operation retains the replaced unit's date of commencement, and the replacement unit is treated as a separate unit with a separate date for commencement of operation.
- (7) "Designated representative" means the person who is authorized by the owner or operator of the unit to represent and legally bind the owner or operator in matters pertaining to this rule, following the procedures for authorization and the responsibilities of the designated representative in 40 CFR 72, Subpart B*, including the authorization of an alternate designated representative.
- (8) "Fossil fuel" means natural gas, petroleum, coal, or any solid, liquid, or gaseous fuel derived from these materials.
- (9) "Fossil fuel-fired" means the following:
 - (A) Except as provided in clause (B), the combustion of fossil fuel, alone or in combination with any other fuel, under any of the following scenarios:
 - (i) The fossil fuel actually combusted comprises more than fifty percent (50%) of the annual heat input on a British thermal unit (Btu) basis during any year starting in 1995. If a unit had no heat input in 1995, then during the last year of operation of the unit prior to 1995.
 - (ii) The fossil fuel is projected to comprise more than fifty percent (50%) of the annual heat input on a Btu basis during any year, provided that the unit is fossil fuel-fired as of the date during the year that the unit begins combusting fossil fuel.
 - (B) For the purposes of determining applicability in section 1(b)(3) and 1(b)(4) of this rule, combusting any amount of fossil fuel in any calendar year.
- (10) "Heat input" means the product, expressed in Btu per unit of time (Btu/hr), of the following:
 - (A) The gross calorific value of the fuel, expressed in Btu per pound (Btu/lb).
 - (B) The fuel feed rate into a combustion device, expressed in mass of fuel per unit of time (lb/hr), as measured, recorded, and reported in accordance with 40 CFR 75, Subpart H*.

Heat input does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

- (11) "Large affected unit" means a unit that meets the applicability criteria in section 1 of this rule.
- (12) "Maximum design heat input" means the maximum amount of fuel per hour, in million British thermal units per hour (MMBtu/hr), that a unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.
- (13) "Nameplate capacity" means the maximum electrical generating output, expressed in megawatt electrical (MWe) output, that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.
- (14) "Operator" means any person who operates, controls, or supervises the operation of a unit, including any holding company, utility system, or plant manager of the unit.
- (15) "Owner" means any of the following persons:
 - (A) The holder of:
 - (i) any portion of the legal or equitable title; or
 - (ii) a leasehold interest;

in a unit.

- (B) Any purchaser of power from a unit under a life-of-the-unit, firm power contractual arrangement, except that, unless expressly provided for in a leasehold agreement, owner does not include a passive lessor, or a person who has an equitable interest through the lessor, whose rental payments are not based, either directly or indirectly, on the revenues or income from the large affected unit.
- (16) "Ozone control period" means the inclusive period:
 - (A) beginning either:
 - (i) May 1 of a calendar year; or
 - (ii) on the deadline for meeting the unit's monitor certification requirements under section 4(a) of this rule; and
 - (B) ending on September 30 of the same year.
- (17) "Potential electrical output capacity" means thirty-three percent (33%) of a unit's maximum design heat input.
- (18) "Replacement", "replace", or "replaced" means the demolition of, or the permanent shutdown and permanent disabling of, a unit, and the construction of another unit, to be used instead of the demolished or shutdown unit.
- (19) "Repowered" means replacement of a coal-fired boiler with one (1) of the following coal-fired technologies at the same source as the coal-fired boiler:
 - (A) Atmospheric or pressurized fluidized bed combustion.
 - (B) Integrated gasification combined cycle.
 - (C) Magnetohydrodynamics.
 - (D) Direct and indirect coal-fired turbines.
 - (E) Integrated gasification fuel cells.
 - (F) As determined by U.S. EPA in consultation with the Secretary of Energy, a derivative of one (1) or more of the technologies under clauses (A) through (E), and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.
- (20) "Unit" means a fossil fuel-fired stationary boiler, combustion turbine, or a combined cycle system.
- (21) "Unit operating day" means a calendar day in which a unit combusts any fuel.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; 326 IAC 10-2-2)

326 IAC 10-2-3 Monitoring provisions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-15; IC 13-17

Sec. 3. (a) The owner or operator of a large affected unit subject to this rule, and to the extent

applicable, the designated representative, shall comply with the monitoring, record keeping, and reporting requirements as provided in this rule and in 40 CFR 75, Subpart H*. The owner or operator of a unit that is not a large affected unit, but that is required to monitor under 40 CFR 75.72(b)(2)(ii)*, shall comply with the same monitoring, record keeping, and reporting requirements as a large affected unit.

- (b) The owner or operator of each large affected unit shall do the following:
- (1) Install all monitoring systems required under this section for monitoring NO ozone season mass emissions and individual unit heat input. This includes all systems required to monitor the following operating parameters in accordance with 40 CFR 75.71* and 40 CFR 75.72*, as applicable:

 - (A) NO emission rate. (B) NO concentration.
 - (C) Stack gas moisture content.
 - (D) Stack gas flow rate.
 - (E) Carbon dioxide (CO₂) or ozone (O₂) concentration.
 - (F) Fuel flow rate.
- (2) Complete all certification tests required under section 5(b) of this rule and meet all other requirements of this section and 40 CFR 75* applicable to the monitoring systems under subdivision
- (3) Record, report, and quality assure the data from the monitoring systems under subdivision (1).
- (c) The designated representative for a large affected unit shall submit written notice to the department and U.S. EPA in accordance with 40 CFR 75.61*.
- (d) The owner or operator of a large affected unit is subject to the applicable provisions of 40 CFR 75* concerning units in long term cold storage.
- (e) The prohibitions in 40 CFR 75.70(c)* apply to any monitoring system, alternative monitoring system, alternative reference method, or any other alternative for a continuous emissions monitoring system required under this rule.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; 326 IAC 10-2-3)

326 IAC 10-2-4 Compliance dates for monitoring

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

- Sec. 4. (a) Except as provided in section 3(d) of this rule, the owner or operator shall meet the monitoring system certification and other requirements of section 3(b) of this rule on or before the applicable dates in this section. The owner or operator shall record, report, and quality assure the data from the monitoring systems under section 3(b)(1) of this rule on and after the following dates:
 - (1) For units that commenced operation before the effective date of this rule, the effective date of this rule.
 - (2) For the owner or operator of a large affected unit that commences operation after the effective date of this rule, and that reports on an annual basis under section 8(b) of this rule, by one hundred eighty (180) calendar days after the date on which the unit commences commercial operation.
 - (3) For the owner or operator of a large affected unit that commences operation after the effective date of this rule, and that reports on a control period basis under section 8(b) of this rule, by the later of the following dates:
 - (A) One hundred eighty (180) calendar days after the date on which the unit commences commercial operation.
 - (B) If the compliance date under clause (A) is not during a control period, then by May 1 immediately following the compliance date under clause (A).

- (4) For the owner or operator of a large affected unit for which construction of a new stack or flue or installation of add-on NO emission controls is completed after the effective date of this rule, and that reports on an annual basis under section 8(b) of this rule, by the earlier of the following dates:
 - (A) One hundred eighty (180) calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO emissions controls.
 - (B) Ninety (90) unit operating days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO emissions controls.
- (5) For the owner or operator of a large affected unit for which construction of a new stack or flue or installation of add-on NO emission controls is completed after the effective date of this rule and that reports on a control period basis under section 8(b) of this rule, by the later of the following dates:
 - (A) The earlier of:
 - (i) one hundred eighty (180) calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO emissions controls; or
 - (ii) ninety (90) unit operating days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO emissions controls.
 - (B) If the compliance date under clause (A) is not during a control period, May 1 immediately following the compliance date under clause (A).
- (b) The owner or operator of a large affected unit that does not meet the applicable compliance date set forth in subsection (a) for any monitoring system under section 3 of this rule shall, for each monitoring system, determine, record, and report maximum potential or, as appropriate, minimum potential, values for the following:

 - (1) NO $_{\rm x}$ emission rate. (2) NO $_{\rm x}$ concentration.
 - (3) Stack gas moisture content.
 - (4) Stack gas flow rate.
 - (5) Fuel flow rate.
 - (6) Any other parameters required to determine NO_x mass emissions and heat input in accordance with the following, as applicable:
 - (A) 40 CFR 75.31(b)(2)*.
 - (B) 40 CFR 75.31(c)(3)*.
 - (C) 40 CFR 75, Appendix D, Section 2.4*.
 - (D) 40 CFR 75, Appendix E, Section 2.5*.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division: 326 IAC 10-2-4)

326 IAC 10-2-5 Certification and recertification

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

- Sec. 5. (a) The owner or operator of a large affected unit is exempt from the initial certification requirements of this section for a monitoring system under section 3 of this rule if the following conditions are met:
 - (1) The monitoring system has been previously certified in accordance with 40 CFR 75*.
 - (2) The applicable quality assurance and quality control requirements of 40 CFR 75.21*, 40 CFR 75, Appendix B*, 40 CFR 75, Appendix D*, and 40 CFR 75, Appendix E* are fully met for the certified monitoring system described in subdivision (1).
- (b) The recertification provisions of this section apply to a monitoring system that is exempt from initial certification requirements under this section.
- (c) Except as provided in subsection (a), the owner or operator of a large affected unit shall comply with the initial certification and recertification procedures in 40 CFR 75.20* for a continuous monitoring

system (a continuous emission monitoring system or an excepted monitoring system under 40 CFR 75, Appendix D* or 40 CFR 75, Appendix E*). The owner or operator of a unit that qualifies to use the low mass emissions (LME) excepted monitoring methodology under 40 CFR 75.19* or that qualifies to use an alternative monitoring system under 40 CFR 75, Subpart E* shall comply with the procedures in subsection (d) or section 7(b) of this rule, respectively.

(d) The owner or operator of a unit qualified under 40 CFR 75.19* to use the LME excepted methodology shall meet the applicable certification and recertification requirements in 40 CFR 75.19(a)(2)* and 40 CFR 75.20(h)*. If the owner or operator of the unit elects to certify a fuel flowmeter system for heat input determination, the owner or operator shall meet the certification and recertification requirements in 40 CFR 75.20(g)*.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; 326 IAC 10-2-5)

326 IAC 10-2-6 Data substitution

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-15; IC 13-17

- Sec. 6. If a monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR 75*, data must be substituted using the applicable missing data procedures from one (1) of the following:
 - (1) 40 CFR 75, Subpart D*.
 - (2) 40 CFR 75, Subpart H*.
 - (3) 40 CFR 75, Appendix D*.
 - (4) 40 CFR 75, Appendix E*.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; 326 IAC 10-2-6)

326 IAC 10-2-7 Petition for approval of alternatives

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

- Sec. 7. (a) A petition under 40 CFR 75.66* requesting approval of alternatives to any requirement of section 3, 4, 5, 6, or 8 of this rule may be made as follows:
 - (1) Except as provided in subdivision (3), the designated representative of a large affected unit that is subject to an acid rain emissions limitation may submit a petition to U.S. EPA requesting approval to apply an alternative to any requirement of section 3, 4, 5, 6, or 8 of this rule. The designated representative may not use the alternative unless the alternative is approved in writing by U.S. EPA.
 - (2) The designated representative of a large affected unit that is not subject to an acid rain limitation may submit a petition to both the department and U.S. EPA requesting approval to apply an alternative to any requirement of section 3, 4, 5, 6, or 8 of this rule. The designated representative may not use the alternative unless the alternative is approved in writing by both the department and U.S. EPA.
 - (3) The designated representative of a large affected unit that is subject to an acid rain emissions limitation may submit a petition to both the department and U.S. EPA requesting approval to apply an alternative to a requirement concerning any additional continuous emission monitoring system required under 40 CFR 75.72*. The designated representative may not use the alternative unless the alternative is approved in writing by both the department and U.S. EPA.

(b) The designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by U.S. EPA and, if applicable, the department under 40 CFR 75, Subpart E*, shall comply with the applicable notification and application procedures of 40 CFR 75.20(f)*.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; 326 IAC 10-2-7)

326 IAC 10-2-8 Record keeping and reporting

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

- Sec. 8. (a) The designated representative of a large affected unit shall comply with all applicable record keeping and reporting requirements in this section and 40 CFR 75.73*, as follows:
 - (1) The owner or operator of a large affected unit shall comply with requirements of both:
 - (A) 40 CFR 75.73(c)*; and
 - (B) 40 CFR 75.73(e)*.
 - (2) The designated representative shall submit an application to the department within forty-five (45) days after completing all initial certification or recertification tests required under section 5 of this rule, including the information required under 40 CFR 75.63*.
 - (b) The designated representative shall submit quarterly reports as follows:
 - (1) If the large affected unit is subject to an acid rain emissions limitation or if the owner or operator of the unit chooses to report on an annual basis under this section, the designated representative shall:
 - (A) meet the requirements of 40 CFR 75, Subpart H* for the entire year; and
 - (B) report the NO mass emissions data and heat input data in an electronic quarterly report in a format prescribed by U.S. EPA, for each calendar quarter corresponding to the earlier of:
 - (i) the date of provisional certification; or
 - (ii) for a unit that commences commercial operation on or after the effective date of this rule, the calendar quarter corresponding to the earlier of:
 - (AA) the date of provisional certification; or
 - (BB) the applicable deadline for initial certification under section 4(a) of this rule.
 - (2) If the large affected unit is not subject to an acid rain emissions limitation, the designated representative shall meet either of the following requirements:
 - (A) If the owner or operator chooses to report on an annual basis, both of the following:
 - (i) Meet the requirements of 40 CFR 75, Subpart H* for the entire year.
 - (ii) Report the NO_{χ} mass emissions data and heat input data for the unit in accordance with this clause.
 - (B) If the owner or operator does not choose to report on an annual basis, both of the following:
 - (i) Meet the requirements of 40 CFR 75, Subpart H* for the control period.
 - (ii) Report NO mass emissions data and heat input data for the control period in an electronic quarterly report in a format prescribed by U.S. EPA, for each calendar year beginning with:
 - (AA) the effective date of this rule; or
 - (BB) for a unit that commences commercial operation on or after the effective date of this rule, the calendar quarter corresponding to the earlier of:
 - (aa) if it falls during the control period, the date of provisional certification;
 - (bb) if it falls during the control period, the applicable deadline for initial certification under section 4(a) of this rule; or
 - (cc) if neither subitem (aa) nor (bb) fall during the control period, the quarter that includes May 1 through June 20 of the first control period after the date of provisional certification or the applicable deadline for initial certification under section 4(a) of this rule.
 - (3) For large affected units that are also subject to an acid rain emissions limitation or another annual trading program, quarterly reports must include the following:
 - (A) Applicable data and information required by 40 CFR 75, Subparts F through H* as applicable.

- (B) $\overline{\text{NO}_{\text{x}}}$ mass emission data, heat input data, and other information required by this rule.
- (c) The designated representative shall submit to U.S. EPA a compliance certification, in a format prescribed by U.S. EPA, in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification must state that:
 - (1) the monitoring data submitted were recorded in accordance with the applicable requirements of this section and 40 CFR 75*, including the quality assurance procedures and specifications;
 - (2) for a unit with add-on NO_x ozone season emission controls and for all hours where NO_x data are substituted in accordance with 40 CFR 75.34(a)(1)*, the add-on emission controls were operating within the range of parameters listed in the quality assurance and quality control program under 40 CFR 75, Appendix B* and the substitute data values do not systematically underestimate NO_x emissions: and
 - (3) for a unit that is reporting on a control period basis under subsection (b)(2)(B), the NO mass emission rate and NO concentration values substituted for missing data under 40 CFR 75, Subpart D* are calculated using only values from a control period and do not systematically underestimate NO emissions.
- (d) Owners and operators of each large affected unit at the source shall comply with the following record keeping and reporting requirements:
 - (1) Unless otherwise provided, the owners and operators of each large affected unit at the source shall keep on site each of the following documents:
 - (A) The current certificate of representation for the designated representative for each large affected unit, and all documents that demonstrate the truth of the statements in the certificate of representation.
 - (B) All emissions monitoring information, in accordance with section 3 of this rule, with retention for a minimum of three (3) years.
 - (C) Copies of all reports and other submissions and all records made or required under this rule for a period of five (5) years from the date the document was created.
 - (2) The designated representative of each large affected unit at the source shall submit the reports required under this rule.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; 326 IAC 10-2-8)

326 IAC 10-2-9 Ozone season NO budget

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-15; IC 13-17

- Sec. 9. (a) The ozone season budget for all large affected units meeting the applicability criteria in section 1(b)(1) and 1(b)(2) of this rule is eight thousand eight (8,008) tons of NO for each control period, as defined in section 2 of this rule. The sum of the total number of tons of NO emitted from each large affected unit under section 1(b)(1) and 1(b)(2) of this rule must be less than or equal to the ozone season budget for large affected units.
- (b) By May 1 of each year, the department shall conduct an annual review of actual NO emissions during the previous control period from all large affected units under section 1(b)(1) and 1(b)(2) of this rule, including any new units, to ensure that the total emissions remain below the ozone season budget.

(Air Pollution Control Division: 326 IAC 10-2-9)

SECTION 2. 326 IAC 10-3-1 IS AMENDED TO READ AS FOLLOWS:

326 IAC 10-3-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to any of the following:

- (1) A Portland cement kiln with process rates equal to or greater than the following:
 - (A) For long dry kilns, of twelve (12) tons per hour (tph).
 - (B) For long wet kilns, of ten (10) tph.
 - (C) For preheater kilns, of sixteen (16) tph. or
 - (D) For precalciner and combined preheater and precalciner kilns, of twenty-two (22) tph.
- (2) The following affected boilers:

Source	Point ID	Unit
(A) Bethlehem Steel Corporation ArcelorMittal Burns Harbor	075	Boiler #7
	076	Boiler #8
	077	Boiler #9
	078	Boiler #10
	079	Boiler #11
	080	Boiler #12
(B) LTV Steel Company ArcelorMittal Indiana Harbor	020	Boiler #4
	021	Boiler #5
	022	Boiler #6
	023	Boiler #7
	024	Boiler #8

- (3) Any other blast furnace gas-fired boiler with a heat input greater than two hundred fifty million (250,000,000) British thermal units per hour that is not subject to 326 IAC 10-4 or 326 IAC 24-3. defined as a large affected unit under 326 IAC 10-2-2(c)(11).
- (b) A unit subject to this rule and a New Source Performance Standard, (NSPS), a National Emission Standard for Hazardous Air Pollutants, or an emission limit established under 326 IAC 2 shall must comply with the limitations and requirements of the more stringent rule. For a unit subject to this rule and 326 IAC 10-1, compliance with the emission limits in section 3(a)(1)(A) of this rule during the ozone control period shall be is deemed to be compliance with the emission limits in 326 IAC 10-1-4(b)(1) during the ozone control period, and such the limits shall supersede those in 326 IAC 10-1-4(b)(1) during the ozone control period.
- (c) The monitoring, record keeping, and reporting requirements under sections 4 and 5 of this rule shall not apply to a unit that opts into the NO_budget trading program under 326 IAC 10-4 or 326 IAC 24.
- (d) (c) The requirements of this rule shall not apply to the specific units subject to this rule during startup and shutdown periods and periods of malfunction.
- (e) (d) During periods of blast furnace reline, startup, and periods of malfunction, the affected boilers shall are not be required to meet the requirement to derive of greater than fifty percent (50%) of the heat input from blast furnace gas.

(Air Pollution Control Division; 326 IAC 10-3-1; filed Aug 17, 2001, 3:45 p.m.: 25 IR 14; errata filed Nov 29, 2001, 12:20 p.m.: 25 IR 1183; filed Jul 7, 2003, 4:00 p.m.: 26 IR 3550; filed Jan 26, 2007, 10:25 a.m.: 20070221-IR-326050117FRA)

SECTION 3. 326 IAC 10-3-3 IS AMENDED TO READ AS FOLLOWS:

326 IAC 10-3-3 Emission limits

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-15; IC 13-17

Sec. 3. (a) After May 31, 2004, an owner or operator of any Portland cement kiln subject to this rule shall not operate the kiln during the ozone control period of each year unless the owner or operator complies with one (1) of the following:

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- (1) Operation of the kiln with one (1) of the following:
 - (A) Low-NO burners.
 - (B) Mid-kiln firing.
- (2) A limit on the amount of NO emitted when averaged over the ozone control period as follows:
 - (A) For long wet kilns, six (6) pounds of NO per ton of clinker produced.
 - (B) For long dry kilns, five and one-tenth (5.1) pounds of NO per ton of clinker produced.
 - (C) For preheater kilns, three and eight-tenths (3.8) pounds of NO per ton of clinker produced.
 - (D) For precalciner and combined preheater and precalciner kilns, two and eight-tenths (2.8) pounds of NO per ton of clinker produced.
- (3) Installation and use of alternative control techniques that may include kiln system modifications, such as conversions to semi-dry precalciner kiln processing, subject to department and U.S. EPA approval that achieve a thirty percent (30%) emissions decrease from baseline ozone control period emissions. Baseline emissions shall must be the average of the sum of ozone control period emissions for the two (2) highest emitting years from 1995 through 2000 determined in accordance with subsection (d)(1).
- (b) The owner or operator of any a Portland cement kiln proposing to install and use an alternative control technique under subsection (a)(3) shall submit the proposed alternative control technique and calculation of baseline emissions with supporting documentation to the department and U.S. EPA for approval by May 1, 2003. The department shall include the approved plan with emission limitations in the source's operating permit.
- (c) The owner or operator of any affected boiler subject to this rule shall limit NO emissions to seventeen-hundredths (0.17) pound of NO per million Btus (lb/MMBtu) of heat input averaged over the ozone control period and ensure that greater than fifty percent (50%) of the heat input shall be is derived from blast furnace gas averaged over an ozone control period. By May 1, 2003, or by May 1 of the year the affected boiler becomes subject to this rule, the owner or operator of an affected boiler shall submit to the department a compliance plan for approval by the department and U.S. EPA including the following:
 - (1) Baseline stack test data, or proposed testing, for establishment of fuel specific emission factors, or the emission factors for the type of boiler from the Compilation of Air Pollutant Emission Factors (AP-42), as defined at 326 IAC 1-1-3.5, for each fuel to be combusted. The fuel specific emission factor shall must be developed from representative emissions testing, pursuant to 40 CFR 60, Appendix A, Method 7*, 7A*, 7C*, 7D*, or 7E*, or 40 CFR 75*, based on a range of typical operating conditions. The owner or operator must:
 - (A) establish that these operating conditions are representative, subject to approval by the department; and
 - (B) must certify that the emissions testing is being conducted under representative conditions.
 - (2) Anticipated fuel usage and combination of fuels.
 - (3) If desired by the source, a proposal for averaging the emission limit and fuel allocation among commonly owned units, including the proposed methodology for determining compliance.
 - (d) Baseline ozone control period emissions shall must be determined using one (1) of the following methods:
 - (1) The average of the emission factors for the type of kiln from the Compilation of Air Pollutant Emission Factors (AP-42), Fifth Edition, January 1995*, Supplements A through G, December 2000* and the NO Control Technologies for the Cement Industry, Final Report, September 19, 2000*.
 - (2) The site-specific emission factor developed from representative emissions testing, pursuant to 40 CFR 60, Appendix A, Method 7*, 7A*, 7C*, 7D*, or 7E*, or 40 CFR 75*, based on a range of typical operating conditions. The owner or operator must:
 - (A) establish that these operating conditions are representative, subject to approval by the department; and
 - (B) certify that the emissions testing is being conducted under representative conditions.
 - (3) An alternate method for establishing the emissions emission factors, when submitted with supporting data to substantiate such emissions the emission factors and approved by the department and U.S. EPA as set forth in subsection (b).
 - (4) For affected boilers, as outlined in the site-specific compliance plan submitted under subsection (c).

*These documents are incorporated by reference and may be obtained from the Government Printing Publishing Office, 732 North Capitol Street NW, Washington, D.C. 20402 www.gpo.gov, or are available for copying review at the Indiana Department of Environmental Management, Office of Air Quality Legal Counsel, Indiana Government Center North, Tenth Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Division; <u>326 IAC 10-3-3</u>; filed Aug 17, 2001, 3:45 p.m.: 25 IR 16; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1569; filed Jan 27, 2006, 11:25 a.m.: 29 IR 1876)

Indiana Register

SECTION 4. THE FOLLOWING ARE REPEALED: <u>326 IAC 10-4</u>; <u>326 IAC 24-3-1</u>; <u>326 IAC 24-3-2</u>; <u>326 IAC 24-3-1</u>.

Notice of Public Hearing

Posted: 01/31/2018 by Legislative Services Agency An httml version of this document.

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Indiana's Regulations for Large Affected Units under the NO_X SIP Call

EPA views regarding comments received by IDEM

The Indiana Department of Environmental Management (IDEM) is in the process of developing proposed revisions to Indiana's rules addressing the state's obligations under the NO_X SIP Call (40 CFR 51.121 and 51.122) with respect to Indiana units that were or would have been covered under the state's rules for the former NO_X Budget Trading Program (NBP) and/or CAIR NO_X Ozone Season Trading Program but that are not covered by the current CSAPR NO_X Ozone Season Group 2 Trading Program. In the draft rule revisions, IDEM calls these units "Large Affected Units." IDEM has requested EPA's views regarding the August 4, 2017 comments submitted to IDEM by ArcelorMittal USA LLC (ArcelorMittal), Citizens Energy Group (Citizens), and Alcoa Power Generating Inc. Warrick Power Plant (Warrick) on the draft rule revisions.

Requirement for enforceable control measures.

One commenter supports the elimination of all the NBP and CAIR trading program requirements in Indiana's rules for Large Affected Units "without imposing new mass emission limitations" on those units. ArcelorMittal at 1-2.

EPA generally disagrees with this comment. Under 40 CFR 51.121(f)(2), where the SIP adopted by a state to meet the requirements of the NO_X SIP Call imposes control measures on certain types of sources – including the types of sources comprising Indiana's Large Affected Units – as a means of meeting the state's NO_X budget, then those measures must include enforceable mechanisms ensuring that the sources' collective emissions will not exceed the emissions the state projected for those sources for purposes of the SIP. The requirement for Indiana's SIP to include enforceable control measures for the state's Large Affected Units thus is not "new," but originated with Indiana's choice of the sources covered in the state's original SIP addressing the NO_X SIP Call. One form of enforceable control measure that can be used to meet this requirement is a collective emissions cap, as under the former NBP and CAIR trading programs.

The requirement that a state's SIP include enforceable control measures for these sources does not lapse simply because the requirement is no longer being met through the same measures initially adopted in the SIP. The regulations at 40 CFR 51.121(r)(2) specifically require a state whose SIP used the NBP as the mechanism for satisfying a portion of its emission reduction requirements to adopt replacement SIP provisions satisfying the same portion of the emission reduction requirements as the state originally projected the trading program would satisfy. Like the original control measures, the replacement measures do not have to be source-specific mass emission caps or rate limits, but could be collective caps instead. For the duration of the CAIR trading program, one way to satisfy the NO_X SIP Call emission reductions requirements for the Large Affected Units was to include the units in that trading program, and Indiana did so. Now that the CAIR trading program is no longer in operation, the ongoing requirement for enforceable control measures must be met in some other way.

EPA notes that Indiana could choose to treat some of the Large Affected Units – specifically, the blast furnace gas-fired units – differently from the other Large Affected Units with respect to this requirement. As approved by EPA, the SIP provisions that Indiana initially adopted to address the state's obligations under the NO_X SIP Call did not rely on emission reductions from any of the state's blast

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furnace gas-fired units to meet the state's overall emission reduction requirements. The units were not included in the NBP under the SIP as initially approved, and their emissions were explicitly represented at projected uncontrolled emission levels in the state's overall NO_X SIP Call budget – that is, the budget consisting of NBP and non-NBP emissions combined. EPA acknowledged Indiana's unique treatment of blast furnace gas-fired units in the proposed and final SIP approvals. In the subsequent SIP revision where Indiana brought some of the blast furnace gas-fired units into the NBP, the approved adjustment to the NBP budget was similarly computed based on the state's allocated shares to those units of the projected uncontrolled emissions of all the blast furnace gas-fired units. As a result, because the state did not rely on emission reductions from these blast furnace gas-fired units in the approved SIP provisions adopted to meet its NO_X SIP Call obligations, ongoing enforceable control measures for these units are not required under § 51.121(f)(2). However, if Indiana now chooses to exclude these units and to meet the ongoing requirements for the remaining Large Affected Units through the use of a collective cap, the cap for the remaining units would need to be adjusted to reflect the removal of the blast furnace gas-fired units, reversing the increase in the NBP budget that was implemented when Indiana added those blast furnace gas-fired units to the NBP.

Requirement for part 75 monitoring and reporting.

All three commenters assert that Indiana's SIP no longer needs to require Large Affected Units to monitor and report emissions pursuant to 40 CFR part 75. ArcelorMittal at 4-6; Citizens at 3-4; Warrick at 2-3.

EPA disagrees with these comments. Under 40 CFR 51.121(i)(4), where the SIP adopted by a state to meet the requirements of the NO_X SIP Call imposes control measures on certain types of sources – including the types of sources comprising Indiana's Large Affected Units – as a means of meeting the state's NO_X budget, then the SIP must require the sources to monitor and report ozone season NO_X emissions in accordance with 40 CFR part 75.

One commenter asserts that part 75 monitoring and reporting is not required because if IDEM's rule revisions were to end enforceable control measures for the Large Affected Units, as advocated by the commenter, then the SIP would no longer impose control measures on these sources and the part 75 requirements would therefore no longer be required. This argument rests entirely on a flawed premise because, as discussed above, the SIP is in fact required to retain enforceable control measures.

All three commenters argue that part 75 monitoring and reporting should no longer be required because the Large Affected Units no longer participate in a trading program. This argument ignores the fact that the part 75 monitoring and reporting requirement in § 51.121(i)(4) is not linked to any specific form of enforceable control measure, but is triggered simply by Indiana's choice of the sources relied on to meet the state's NO_X budget in the state's original SIP addressing the NO_X SIP Call. As discussed above, the requirement for enforceable control measures does not lapse simply because the same measures are no longer used, and consequently the requirement for part 75 monitoring and reporting does not lapse either.

EPA notes that if Indiana chooses to exclude blast furnace gas-fired units from the set of Large Affected Units for purposes of the ongoing requirement for enforceable control measures, as discussed above, the state could likewise exclude the blast furnace gas-fired units from the ongoing requirement for part 75 monitoring and reporting under § 51.121(i)(4). The reason is the same as discussed above –

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specifically, the fact that Indiana did not rely on emission reductions from these particular units in the approved SIP provisions adopted to address the state's obligations under the NO_X SIP Call.

Treatment of blast furnace gas as fossil fuel.

One commenter asserts that blast furnace gas is not "fossil fuel" and for that reason, in addition to the reasons discussed above, blast furnace gas-fired units in particular should not be subject to part 75 monitoring and reporting requirements. ArcelorMittal at 2-3.

EPA disagrees with this comment. The assertion that blast furnace gas is not fossil fuel is contrary to the relevant definition of the term "fossil fuel." For the purposes here, "fossil fuel" is defined to include not only natural gas, petroleum, and coal, but also "any form of solid, liquid, or gaseous fuel derived from such material." 40 CFR 96.2. The comment acknowledges that blast furnace gas is a product of a chemical reaction that takes place in the processing of iron ore. Although not mentioned in the comment, that chemical reaction also involves coke, which is produced from coal. Consequently, blast furnace gas combusted to produce heat is a gaseous fuel "derived from" coal and therefore meets the relevant definition of "fossil fuel." The possible existence of other regulatory contexts in which the term "fossil fuel" may have been defined more narrowly, as suggested by a pre-NO_X SIP Call letter cited in the comment, has no bearing in this regulatory context.

The comment is also contrary to the historical treatment of blast furnace gas-fired units as fossil fuel-fired units for purposes of the NBP. Indiana treated blast furnace gas-fired units as fossil fuel-fired units in its initial SIP submission addressing the NO_x SIP Call that would have included all of the state's blast furnace gas-fired units in the NBP, like other states that brought blast furnace gas-fired units into the NBP. Indiana then revised its SIP submission to remove all of the blast furnace gas-fired units from the NBP, and later submitted another SIP revision to include some of the units in the NBP. While EPA approved both the revised SIP submission excluding all of the units from the NBP and the subsequent SIP revision including some of the units, neither of those approvals was based on or supports a contention that blast furnace gas-fired units should not be considered fossil fuel-fired units.

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Sent: 10/26/2017 6:57:52 PM

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Subject: Large Affected Units Rulemaking LSA #15-414

Attachments: 2017-10-16 EPA response to industrial comments on IN non-EGU rule.pdf

To: NO_x Large Affected Units Interested Parties

From: Jack Harmon, Indiana Department of Environmental Management

Office of Legal Counsel, Rules Development Branch

Date: October 27, 2017

Subj: NO_x Large Affected Units Rule Revisions

The Indiana Department of Environmental Management (IDEM) is providing this information as an update concerning the rulemaking to transition large affected units from the Clean Air Interstate Rule (CAIR) trading program to the appropriate rules under 326 IAC 10 (LSA #15-414). Draft rule language was published for public comment on July 5, 2017 at http://www.in.gov/legislative/iac/20170705-IR-

<u>326150414SNA.xml.pdf</u>. IDEM is committed to working with U.S. EPA to develop draft rule language that is approvable as an amendment to the Indiana State Implementation Plan (SIP) and addresses the concerns of the affected sources to the extent possible.

IDEM has received comments from U.S. EPA and is ready to prepare the draft rule for preliminary adoption by the Environmental Rules Board. A notice of public hearing will soon be posted in the Indiana Register for the January 10, 2018 board meeting. U.S. EPA's comments are attached to this message. IDEM plans to address U.S. EPA's comments as well as the comments received during the Second Notice of Public Comment Period from affected sources as follows:

- Regulate all blast furnace gas units in 326 IAC 10-3 (non-trading NO_x SIP Call rules).
 - O Applicability at 326 IAC 10-3-1(a)(3) will be revised to include the blast furnace gas units previously regulated under CAIR.
 - o The new monitoring rule at 326 IAC 10-2 for the former trading program for large affected units will <u>not</u> include blast furnace gas units. This returns blast furnace gas units to the regulatory program that existed when the NO_x SIP Call requirements were originally issued (i.e. 0.17 lb NO_x/MMBtu limit and calculation of ozone season emissions).
- Regulate large affected units in a new rule at 326 IAC 10-2 and continue to require Part 75 monitoring.

- o It is IDEM's understanding from verbal discussions with U.S. EPA that there are plans in the future to amend 40 CFR 51.121 to address Part 75 monitoring requirements for non-trading program units. If U.S. EPA makes changes to those requirements, IDEM will re-evaluate the state rules at that time.
- o IDEM will maintain the low mass emissions (LME) provisions of Part 75 monitoring in the draft rule for preliminary adoption.
- o IDEM will prepare a revised budget demonstration as noted below.
- Because of the nature of the rule changes being proposed between the Second Notice of Comment Period and preliminary adoption, a third public comment period will be published with the proposed rule after preliminary adoption.

IDEM will update the draft budget demonstration that was previously shared with sources in 2015 and provide an opportunity for public comment before formally submitting it to U.S. EPA for approval into the SIP. The public comment process for the budget demonstration will be separate from the comment period for the rulemaking process.

Please let me know if you have any concerns or comments and we will be happy to discuss them in advance of the board meeting. Board packet documents, including the draft rule language proposed for preliminary adoption and response to comments, will be available on our website via a link that I will email to you no later than one week prior to the board meeting. Please contact me at 317-234-9535 or email at jaharmon@idem.in.gov with any questions.

Thank you.

Jack Harmon
Senior Environmental Manager
IDEM, Office of Legal Counsel
Rules Development Branch
100 N. Senate Ave.
Indianapolis, IN 46204
317-234-9535
jaharmon@idem.in.gov

Indiana's Regulations for Large Affected Units under the NO_X SIP Call

EPA views regarding comments received by IDEM

The Indiana Department of Environmental Management (IDEM) is in the process of developing proposed revisions to Indiana's rules addressing the state's obligations under the NO_x SIP Call (40 CFR 51.121 and 51.122) with respect to Indiana units that were or would have been covered under the state's rules for the former NO_x Budget Trading Program (NBP) and/or CAIR NO_x Ozone Season Trading Program but that are not covered by the current CSAPR NO_x Ozone Season Group 2 Trading Program. In the draft rule revisions, IDEM calls these units "Large Affected Units." IDEM has requested EPA's views regarding the August 4, 2017 comments submitted to IDEM by ArcelorMittal USA LLC (ArcelorMittal), Citizens Energy Group (Citizens), and Alcoa Power Generating Inc. Warrick Power Plant (Warrick) on the draft rule revisions.

Requirement for enforceable control measures.

One commenter supports the elimination of all the NBP and CAIR trading program requirements in Indiana's rules for Large Affected Units "without imposing new mass emission limitations" on those units. ArcelorMittal at 1-2.

EPA generally disagrees with this comment. Under 40 CFR 51.121(f)(2), where the SIP adopted by a state to meet the requirements of the NO_X SIP Call imposes control measures on certain types of sources – including the types of sources comprising Indiana's Large Affected Units – as a means of meeting the state's NO_X budget, then those measures must include enforceable mechanisms ensuring that the sources' collective emissions will not exceed the emissions the state projected for those sources for purposes of the SIP. The requirement for Indiana's SIP to include enforceable control measures for the state's Large Affected Units thus is not "new," but originated with Indiana's choice of the sources covered in the state's original SIP addressing the NO_X SIP Call. One form of enforceable control measure that can be used to meet this requirement is a collective emissions cap, as under the former NBP and CAIR trading programs.

The requirement that a state's SIP include enforceable control measures for these sources does not lapse simply because the requirement is no longer being met through the same measures initially adopted in the SIP. The regulations at 40 CFR 51.121(r)(2) specifically require a state whose SIP used the NBP as the mechanism for satisfying a portion of its emission reduction requirements to adopt replacement SIP provisions satisfying the same portion of the emission reduction requirements as the state originally projected the trading program would satisfy. Like the original control measures, the replacement measures do not have to be source-specific mass emission caps or rate limits, but could be collective caps instead. For the duration of the CAIR trading program, one way to satisfy the NO_X SIP Call emission reductions requirements for the Large Affected Units was to include the units in that trading program, and Indiana did so. Now that the CAIR trading program is no longer in operation, the ongoing requirement for enforceable control measures must be met in some other way.

EPA notes that Indiana could choose to treat some of the Large Affected Units – specifically, the blast furnace gas-fired units – differently from the other Large Affected Units with respect to this requirement. As approved by EPA, the SIP provisions that Indiana initially adopted to address the state's obligations under the NO_X SIP Call did not rely on emission reductions from any of the state's blast

furnace gas-fired units to meet the state's overall emission reduction requirements. The units were not included in the NBP under the SIP as initially approved, and their emissions were explicitly represented at projected uncontrolled emission levels in the state's overall NO_x SIP Call budget – that is, the budget consisting of NBP and non-NBP emissions combined. EPA acknowledged Indiana's unique treatment of blast furnace gas-fired units in the proposed and final SIP approvals. In the subsequent SIP revision where Indiana brought some of the blast furnace gas-fired units into the NBP, the approved adjustment to the NBP budget was similarly computed based on the state's allocated shares to those units of the projected uncontrolled emissions of all the blast furnace gas-fired units. As a result, because the state did not rely on emission reductions from these blast furnace gas-fired units in the approved SIP provisions adopted to meet its NO_x SIP Call obligations, ongoing enforceable control measures for these units are not required under § 51.121(f)(2). However, if Indiana now chooses to exclude these units and to meet the ongoing requirements for the remaining Large Affected Units through the use of a collective cap, the cap for the remaining units would need to be adjusted to reflect the removal of the blast furnace gas-fired units, reversing the increase in the NBP budget that was implemented when Indiana added those blast furnace gas-fired units to the NBP.

Requirement for part 75 monitoring and reporting.

All three commenters assert that Indiana's SIP no longer needs to require Large Affected Units to monitor and report emissions pursuant to 40 CFR part 75. ArcelorMittal at 4-6; Citizens at 3-4; Warrick at 2-3.

EPA disagrees with these comments. Under 40 CFR 51.121(i)(4), where the SIP adopted by a state to meet the requirements of the NO_X SIP Call imposes control measures on certain types of sources – including the types of sources comprising Indiana's Large Affected Units – as a means of meeting the state's NO_X budget, then the SIP must require the sources to monitor and report ozone season NO_X emissions in accordance with 40 CFR part 75.

One commenter asserts that part 75 monitoring and reporting is not required because if IDEM's rule revisions were to end enforceable control measures for the Large Affected Units, as advocated by the commenter, then the SIP would no longer impose control measures on these sources and the part 75 requirements would therefore no longer be required. This argument rests entirely on a flawed premise because, as discussed above, the SIP is in fact required to retain enforceable control measures.

All three commenters argue that part 75 monitoring and reporting should no longer be required because the Large Affected Units no longer participate in a trading program. This argument ignores the fact that the part 75 monitoring and reporting requirement in § 51.121(i)(4) is not linked to any specific form of enforceable control measure, but is triggered simply by Indiana's choice of the sources relied on to meet the state's NO_X budget in the state's original SIP addressing the NO_X SIP Call. As discussed above, the requirement for enforceable control measures does not lapse simply because the same measures are no longer used, and consequently the requirement for part 75 monitoring and reporting does not lapse either.

EPA notes that if Indiana chooses to exclude blast furnace gas-fired units from the set of Large Affected Units for purposes of the ongoing requirement for enforceable control measures, as discussed above, the state could likewise exclude the blast furnace gas-fired units from the ongoing requirement for part 75 monitoring and reporting under § 51.121(i)(4). The reason is the same as discussed above –

specifically, the fact that Indiana did not rely on emission reductions from these particular units in the approved SIP provisions adopted to address the state's obligations under the NO_X SIP Call.

Treatment of blast furnace gas as fossil fuel.

One commenter asserts that blast furnace gas is not "fossil fuel" and for that reason, in addition to the reasons discussed above, blast furnace gas-fired units in particular should not be subject to part 75 monitoring and reporting requirements. ArcelorMittal at 2-3.

EPA disagrees with this comment. The assertion that blast furnace gas is not fossil fuel is contrary to the relevant definition of the term "fossil fuel." For the purposes here, "fossil fuel" is defined to include not only natural gas, petroleum, and coal, but also "any form of solid, liquid, or gaseous fuel derived from such material." 40 CFR 96.2. The comment acknowledges that blast furnace gas is a product of a chemical reaction that takes place in the processing of iron ore. Although not mentioned in the comment, that chemical reaction also involves coke, which is produced from coal. Consequently, blast furnace gas combusted to produce heat is a gaseous fuel "derived from" coal and therefore meets the relevant definition of "fossil fuel." The possible existence of other regulatory contexts in which the term "fossil fuel" may have been defined more narrowly, as suggested by a pre-NO_X SIP Call letter cited in the comment, has no bearing in this regulatory context.

The comment is also contrary to the historical treatment of blast furnace gas-fired units as fossil fuel-fired units for purposes of the NBP. Indiana treated blast furnace gas-fired units as fossil fuel-fired units in its initial SIP submission addressing the NO_x SIP Call that would have included all of the state's blast furnace gas-fired units in the NBP, like other states that brought blast furnace gas-fired units into the NBP. Indiana then revised its SIP submission to remove all of the blast furnace gas-fired units from the NBP, and later submitted another SIP revision to include some of the units in the NBP. While EPA approved both the revised SIP submission excluding all of the units from the NBP and the subsequent SIP revision including some of the units, neither of those approvals was based on or supports a contention that blast furnace gas-fired units should not be considered fossil fuel-fired units.

Message

From: Bem, Susan [SBEM@idem.IN.gov]

Sent: 3/20/2017 8:58:34 PM

To: Arra, Sarah [Arra.Sarah@epa.gov]; Harmon, Jack [JAHarmon@idem.IN.gov]; Boling, Jean [JBoling@idem.IN.gov]

Subject: RE: Indiana Non-EGU SIP Revision

Jack mentioned that you are looking at setting up a call with CAMD. That may be an easier way to talk through the details. The three Alcoa Warrick Units were part of non-EGU portion of both the NOx Budget Trading Rules and CAIR. So they are part of the current non-EGU rule that we are working on and understand that they may not opt out of the SIP call. For the non-EGU rule draft language we just want to allow the option for sources to report annually if they are also ARP units, but we shouldn't need to require it. In comment A18 we were asked to include the starting quarter language for the units reporting for the entire year. We can do that. As the separate part of that comment there is the 75.74(a) and (b) portion. I am not sure if we have fully addressed EPA's comment on for that second part, but if we are going to have a call we can talk about that then.

From: Arra, Sarah [mailto:Arra.Sarah@epa.gov]

Sent: Monday, March 20, 2017 4:30 PM

To: Harmon, Jack <JAHarmon@idem.IN.gov>; Bem, Susan <SBEM@idem.IN.gov>

Subject: FW: Indiana Non-EGU SIP Revision

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Does this answer your question? I don't think it clarifies my understanding, but you know your rules better than I do. Let me know if this answers your question or if you still want me to set up a call with CAMD about this.

From: Nichols, Louis

Sent: Monday, March 20, 2017 3:09 PM **To:** Arra, Sarah Arra.Sarah@epa.gov>

Cc: Murray, Beth < Murray. Beth@epa.gov>; Lifland, David < Lifland. David@epa.gov>; Mercado, Edgar

<Mercado.Edgar@epa.gov>

Subject: RE: Indiana Non-EGU SIP Revision

Warrick, units 1-3 are non-EGUs that opted-in to the Acid Rain Program. ARP units do not report NOx mass emissions unless they are in some State or Federal NOx mass program. So, they need to be included in the SIP. They may even opt-out of ARP, but they cannot opt-out of the Indiana SIP call. If you have any further questions, please let me know. Thank you.

From: Arra, Sarah

Sent: Thursday, March 09, 2017 4:45 PM
To: Nichols, Louis < Nichols, Louis@epa.gov >
Cc: Murray, Beth < Murray, Beth@epa.gov >
Subject: RE: Indiana Non-EGU SIP Revision

Thanks for the information. Would Warrick be affected by this rulemaking? Would an opt-in unit under ARP be SIP approved?

From: Nichols, Louis

Sent: Thursday, March 09, 2017 2:38 PM **To:** Arra, Sarah Arra.Sarah@epa.gov

Cc: Murray, Beth < <u>Murray.Beth@epa.gov</u>> **Subject:** Indiana Non-EGU SIP Revision

One thing that you may or may not be aware of is that Indiana has three Acid Rain Opt-in units under 40 CFR 74. Warrick, units 1-3 at Alcoa are industrial units that have to report SO2, NOx emission rate, and CO2 as if they are Acid Rain Program units. They must report annual NOx mass like all other ARP units. If you have any questions, please let me know. Thank you.

Message

From: Nichols, Louis [Nichols.Louis@epa.gov]

Sent: 3/20/2017 8:09:13 PM

To: Arra, Sarah [Arra.Sarah@epa.gov]

CC: Murray, Beth [Murray.Beth@epa.gov]; Lifland, David [Lifland.David@epa.gov]; Mercado, Edgar

[Mercado.Edgar@epa.gov]

Subject: RE: Indiana Non-EGU SIP Revision

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From: Arra, Sarah

Sent: Thursday, March 09, 2017 4:45 PM
To: Nichols, Louis <Nichols.Louis@epa.gov>
Cc: Murray, Beth <Murray.Beth@epa.gov>
Subject: RE: Indiana Non-EGU SIP Revision

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From: Nichols, Louis

Sent: Thursday, March 09, 2017 2:38 PM

To: Arra, Sarah < Arra, Sarah@epa.gov >
Cc: Murray, Beth < Murray, Beth@epa.gov >
Subject: Indiana Non-EGU SIP Revision

One thing that you may or may not be aware of is that Indiana has three Acid Rain Opt-in units under 40 CFR 74. Warrick, units 1-3 at Alcoa are industrial units that have to report SO2, NOx emission rate, and CO2 as if they are Acid Rain Program units. They must report annual NOx mass like all other ARP units. If you have any questions, please let me know. Thank you.

EPA Comments on Proposed Amendments to 326 IAC 24 and 326 IAC 26-1-5

EPA appreciates the opportunity to comment on Indiana's proposed amendments. In instances where we have the same comments regarding all three of Indiana's proposed trading program rules, the comments are grouped together, organized by rule section instead of by rule.

1. 326 IAC 24-5-1, 24-6-1, and 24-7-1:

- a. For clarity, we recommend adding the words "that are located in Indiana" before the period in section 1(a) of proposed rules 5, 6, and 7.
- b. The proposed incorporation-by-reference provisions fail to incorporate required CFR provisions addressing correction of incorrect allowance allocations. To fix the omission, section 1(c) of proposed rules 5, 6, and 7 should be modified to incorporate by reference paragraphs (c)(1) through (c)(4) and (c)(5)(i) and (ii) in other words, all of paragraph (c) except paragraph (c)(5)(iii) of 40 CFR 97.411, 97.811, and 97.611, respectively.
- c. The proposed incorporation-by-reference provisions incorporate inapplicable CFR provisions concerning recordation deadlines that will have passed and recordation deadlines for allocations from Indian country new unit set-asides. To fix the over-inclusion, section 1(c) of proposed rules 5, 6, and 7 should be modified to exclude the following paragraphs of 40 CFR 97.421, 97.821, and 97.621, respectively:
 - i. 40 CFR 97.421 / 97.621, paragraphs (a) through (d), (h), and (j).
 - ii. 40 CFR 97.821, paragraphs (a), (b), (h), and (j).
- d. The proposed terminology substitution provisions would substitute "Indiana" and/or "the department" for "State" and/or "permitting authority" in CFR provisions that need to reference all CSAPR states and/or all their permitting authorities, not just Indiana and/or IDEM. Indiana can fix the incorrect substitutions in either of two ways. We recommend the simpler approach, which is to remove the global substitution provisions in section 1(d)(1) and (2) from proposed rules 5, 6, and 7. Alternatively, Indiana could keep the global substitution provisions but add exceptions providing that the terms "State" and/or "permitting authority" as defined without substitutions in 40 CFR 97.402, 97.802, and 97.602, respectively, apply for purposes of the following CFR provisions:
 - i. 40 CFR 97.402 / 97.802 / 97.602, definition of "allocate or allocation" (all instances).
 - ii. 40 CFR 97.402 / 97.802 / 97.602, definition of "auction".
 - iii. 40 CFR 97.402 / 97.802 / 97.602, definition of "certifying official".
 - iv. 40 CFR 97.402, definition of "CSAPR NO_X Annual allowance".
 - v. 40 CFR 97.802, definition of "CSAPR NO_X Ozone Season Group 1 allowance".
 - vi. 40 CFR 97.802, definition of "CSAPR NO_X Ozone Season Group 2 allowance".
 - vii. 40 CFR 97.602, definition of "CSAPR SO₂ Group 1 allowance".
 - viii. 40 CFR 97.404 / 97.804 / 97.604, paragraph (c)(2).
 - ix. 40 CFR 97.416 / 97.816 / 97.616, paragraph (a)(1).
 - x. 40 CFR 97.432 / 97.832 / 97.632, paragraph (b).

- e. The proposed terminology substitution provisions that replace general references to state budgets and variability limits with specific references to Indiana's budgets and variability limits do not currently reflect the exact text of the CFR provisions being replaced. Accordingly, we recommend that in section 1(d)(3) and (4) of proposed rules 5, 6, and 7, Indiana change "40 CFR" (at least the first time it appears) to the symbol "§". We also note that these global substitution provisions could be written to be more specific because the substitutions affect only two CFR provisions for each trading program: paragraph (2) of the definition of "common designated representative's share" in 40 CFR 97.402, 97.802, and 97.602, and paragraph (c)(2)(iii) of 40 CFR 97.406, 97.806, and 97.606.
- f. The proposed terminology substitution provisions that replace references to the CFR allocation provisions with references to sections 6, 7, and/or 8 of Indiana's rules do not currently reflect the exact text of the CFR references that need to be replaced. Further, if that issue was corrected without any other changes, the substitution provisions would confusingly modify recordation provisions in 40 CFR 97.421(k), 97.821(k), and 97.621(k) that are already written to accommodate state-determined allocations. Accordingly, we recommend that Indiana replace the global substitution provisions in section 1(d)(5) through (7) of proposed rules 5, 6, and 7 with more specific substitution provisions that insert "sections 6, 7, and 8 of this rule" in place of the following CFR text:

i. Rule 5:

- 1. The text "§§ 97.411 and 97.412" in paragraph (3) of the definition of "common designated representative's share" in 40 CFR 97.402.
- 2. The text "§§ 97.411(a)(2) and (b) and 97.412" in 40 CFR 97.406(b(2).

ii. Rule 6:

- 1. The text "§§ 97.811 and 97.812" in paragraph (2)(iii) of the definition of "common designated representative's share" in 40 CFR 97.802.
- 2. The text "§§ 97.811(a)(2) and (b) and 97.812" in 40 CFR 97.806(b(2).

iii. Rule 7:

- 1. The text "§§ 97.611 and 97.612" in paragraph (3) of the definition of "common designated representative's share" in 40 CFR 97.602.
- 2. The text "§§ 97.611(a)(2) and (b) and 97.612" in 40 CFR 97.606(b(2).

2. 326 IAC 24-7-2:

a. There appears to be an extra word "allocation" in the term "new unit set-aside" in section 2(2) of proposed rule 7.

3. 326 IAC 24-5-3, 24-6-3, and 24-7-3:

a. The proposed January 30 date for submission to EPA of allocations determined under section 8 of Indiana's rules is also the deadline for sources to report fourth quarter emissions data. To ensure that Indiana can use reported fourth quarter emissions data when calculating allocations under section 8(a), we recommend changing the current January 30 date in section 3(4) of proposed rules 5, 6, and 7 to February 6, one week after the deadline for reporting fourth quarter emissions data.

4. 326 IAC 24-5-5, 24-6-5, and 24-7-5:

a. Although section 5(a)(2) of Indiana's rules is written to apply to allocations submitted under section 3(1), this appears to be impossible in practice. Section 5(a)(2) requires control period heat input data for at least three calendar years before the year of calculation of the allocations, but a unit commencing commercial operation on or after January 1, 2016 could report control period heat input data for at most two calendar years before 2018, the year of calculation of the allocations submitted under section 3(1). For clarity, we recommend removing the reference to section 3(1) in section 5(a)(2) of proposed rules 5, 6, and 7.

5. 326 IAC 24-5-5, 24-6-5, and 24-7-5:

a. Indiana states that in section (5)(c) "A unit's control period heat input and a unit's total tons of NO_x emissions during a control period under this section must be determined in accordance with 40 CFR 75*." The state uses the term "must" in 25-5-5, and 25-6-5 and then uses "shall" in 24-7-5. The state might want to be consistent.

6. 326 IAC 24-5-8, 24-6-8, and 24-7-8:

- a. We have identified three apparent text errors in section 8 of proposed rules 5, 6, and 7:
 - i. In section 8(a)(2)(B), it appears that "clause" should be "subdivision".
 - ii. In the introductory text of section 8(b), there appears to be an extra word "and" before "an amount".
 - iii. In the nomenclature for the allocation formula in section 8(b), it appears that "section 7" should be "section 6".

7. 326 IAC 24-6 (multiple sections):

- a. The deadlines for states to submit state-determined allocations to existing units for the control periods in 2019 through 2023 are later under the CSAPR NO_X Ozone Season Group 2 Trading Program than under the other CSAPR trading programs. Indiana therefore has the option to modify proposed rule 6 (but not proposed rule 5 or proposed rule 7) to provide for Indiana to determine and submit state-determined allocations for the control periods in 2019 and 2020 in addition to the control periods in 2021 and later years. The simplest way to exercise this option would be to make the following changes to proposed rule 6 only:
 - i. In section 3(1), change "2021 and 2022" to "2019 through 2022".
 - ii. In the following sections, change "2021" to "2019":
 - 1. Section 2 introductory text.
 - 2. Section 6(a).
 - 3. Section 7(a) introductory text.
 - Section 7(b).
 - Section 7(c)(1).

b. If Indiana does not exercise the option to provide state-determined allocations of CSAPR NO_X Ozone Season Group 2 allowances for the 2019 and 2020 control periods, we would need to record EPA-determined allocations of those allowances to Indiana's units for those control periods. Consequently, we would have to use 40 CFR 97.811(a) to determine the allocations to existing units, and the effective date of any approval of the replacement of that CFR provision by rule 6 could not precede the recordation of those allocations. The recordation deadline for allocations of CSAPR NO_X Ozone Season Group 2 allowances to existing units for the 2019 and 2020 control periods is July 1, 2018. (Note that under 40 CFR 52.38 and 52.39, when a CSAPR SIP revision is approved we generally retain authority to continue to record EPA-determined allocations to all units in the state for any control period for which we have already commenced recordation of allocations to any units in the state).

8. 326 IAC 26-1-5:

a. We generally support replacing the reference to CAIR in Indiana's regional haze rule with a reference to CSAPR, consistent with the current federal Regional Haze Rule provision at 40 CFR 51.308(e)(4). However, we also note that after we promulgated the rule comparing the visibility impacts of CSAPR and BART and authorizing the use of CSAPR participation as a BART alternative, 77 FR 33642 (June 7, 2012), the D.C. Circuit remanded several CSAPR state budgets, *EME Homer City Generation, L.P. v. EPA,* 795 F.3d 118 (D.C. Cir. 2015). Our response to the remand involves some changes to CSAPR's geographic scope. We have proposed a sensitivity analysis showing that our conclusions from the 2012 CSAPR-vs-BART comparison remain valid despite the geographic scope changes, 81 FR 78954 (November 10, 2016), and we have received a range of comments on that proposal. We do not expect to take final action approving any regional haze SIPs relying on CSAPR participation as a BART alternative until such point as we have finalized the proposed sensitivity analysis after considering the comments received.

9. Repeal of 326 IAC 24-3:

a. Indiana's current CAIR NO_X Ozone Season Trading Program rule includes provisions at 326 IAC 24-3-1(a)(2), 24-3-2(51), 24-3-4(b)(1), and 24-3-11 that require large non-EGUs to monitor and report emissions under 40 CFR part 75. These monitoring and reporting requirements are mandatory SIP elements under 40 CFR 51.121(i)(4), and the Indiana rule provisions that currently implement the requirements should not be repealed until replacement Indiana rule provisions implementing the requirements have been approved elsewhere in the SIP. One possible approach would be for Indiana to exercise the option under 40 CFR 52.38(b)(9)(ii) to bring large non-EGUs into Indiana's CSAPR NO_X Ozone Season Group 2 Trading Program.

Message

From: Nichols, Louis [Nichols.Louis@epa.gov]

Sent: 3/9/2017 6:56:18 PM

To: Arra, Sarah [Arra.Sarah@epa.gov]

CC: Lifland, David [Lifland.David@epa.gov]; Murray, Beth [Murray.Beth@epa.gov]; Mercado, Edgar

[Mercado.Edgar@epa.gov]

Subject: CAMD comments on proposed Indiana Non-EGU SIP revision

Attachments: 2017-03-09 Large Affected Units- 2nd notice Jan 18 Draft comments.docx

I have attached a file with our comments on the proposed Indiana Non-EGU SIP revision. If you have any questions, please let me know. I will be out next week, so if you need to know right away, you may need to contact Beth Murray. Thank you.

Message

From: Nichols, Louis [Nichols.Louis@epa.gov]

Sent: 9/14/2017 6:02:28 PM

To: Arra, Sarah [Arra.Sarah@epa.gov]

Subject: Indiana NOx Budget SiP

Can we get a copy of the Indiana NOx budget SIP inventory (unit specific) that was provided by IDEM for the December 11, 2003 NOx Budget SIP (68 FR 69025) final approval? If you have any questions, please let me know?

Louis P. Nichols Emissions Monitoring Branch Clean Air Markets Division US Environmental Protection Agency MS 6204M 1200 Pennsylvania Avenue, NW Washington, DC 20460 202/343-9008